TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1885.

No. 163.

WILLIAM W. WADE, APPELLANT,

vs.

HENRY B. METCALF AND WILLIAM McCLEERY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

FILED OCTOBER 20, 1885.

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JUDD & DETWEILER, PRINTERS, WASHINGTON, AUGUST 4, 1888.

from the records of the Patent Office, and in this court to be produced as your honors may direct.

That your orator, at the date of his said application for the letters patent aforesaid, was and for some time previously had been a copartner with the said Henry B. Metcalf and William McCleery, the three comprising a firm doing business in said Boston under the name and style of the Boston Button Company; that within two years before the date of filing the said application in the Patent Office your orator, for the purpose of perfecting and reducing to practice his said invention, had applied and connected his improvements aforesaid to machines belonging to the said firm, and after having thus practically demonstrated the utility and value of the said improvements, continued to use them in connection with the machines of the said firm for his benefit and profit; that, as an incident and result of such use by your orator, the said Henry B. Metcalf and William McCleery, as members of the same firm, derived great benefit and profit therefrom, and in consideration thereof assented to and acquiesced in the application of the said improvements to the said machines at the expense of the said firm, but with an actual cost which was insignificant in comparison with the advantages accruing therefrom during the continuance of the said copartnership.

That on the thirtieth day of October, 1880, after long prior efforts on the part of your orator, the said firm was finally dissolved by mutual agreement, and your orator conveyed to his said copartners all his interest in the property and assets of every name and nature of the said firm, but explicitly reserved his rights in and over the improvements aforesaid which had theretofore been attached to or connected with the machines of the said firm, in the words following, to wit:

"And whereas certain machines, forty-eight in number, with a certain improvement thereon, manufactured by said firm,
3 have been and are now in use by said firm, and the said Metcalf and McCleery claim the right as members of said firm, by virtue of the manufacture and use by said firm of said machines with said improvements, to continue such use, and the said Wade reserves the right to deny such claim, therefore nothing in this sale and conveyance shall operate as an assent on the part of said Wade to the right to use said improvements upon said machines, or as granting any rights for such use other than said Metcalf and McCleery now have, whatever they may be, and nothing in this reservation shall be construed to lessen or impair any rights which the said Metcalf and McCleery may have to such use."

That, notwithstanding any claim now asserted or since the dissolution of said firm set up by the said Henry B. Metcalf and William McCleery, they never in fact acquired any right whatsoever to the use of the said improvements embodied in the said machines, except in conjunction with your orator as copartners in the same firm and only so long as the said copartnership continued; that any and all such incidental rights and privileges as they may have acquired and enjoyed during your orator's use of the said improvements in connection with the machines of the said firm terminated with the

dissolution of the said copartnership, and that the right to use the improvements aforesaid so embodied in the said machines did not in any sense belong to the partnership assets nor pass to the assignees of the property of the firm.

That the said Henry B. Metcalf and William McCleery have been notified by your orator for a long time past, ever since his efforts to dissolve the said copartnership, and more especially and fully on the twelfth day of November, 1880, that he denied any and all right on their part from and after the said dissolution to use the improvements aforesaid embodied in the said machines or to derive any benefit or profit therefrom; that such use was an infringement upon your orator's exclusive rights granted and secured to him in and by the letters patent aforesaid, and that if they persisted therein he should prosecute them therefor.

That the invention aforesaid for which the said letters patent were granted was and is of great value and importance; that ever since the date of the grant of the said letters patent your orator has
4 been and still is entitled to the exclusive possession, exercise, and control of the said invention, and the public generally has acquiesced therein; that the practice and employment of the said invention has been and will be of great advantage and profit to your orator, and that he would have derived still further and greater benefits therefrom but for the wrongful acts of the defendants, as hereinafter charged.

That the defendants, well knowing the premises, but designing and contriving to injure your orator and to deprive him of the benefits, profits, and advantages arising and accruing from the exclusive possession, exercise, and control of the invention aforesaid, to which your orator has been and is justly and lawfully entitled, have, without the consent and against the will and protest of your orator, at Boston, in the said district of Massachusetts, since the thirteenth day of October, 1880, unlawfully and wrongfully used and caused to be used the said forty-eight machines or some of them, each of which embraced and embodied in its construction and mode of operation the invention and improvements, or substantial and material parts thereof, set forth and claimed in the said letters patent, and still continue so to do, in violation and infringement of your orator's exclusive rights in the premises, but to what extent the defendants have so used the said machines your orator is ignorant, and prays that the defendants be required to disclose the same.

That the defendants have been and still are deriving and receiving great gains and profits from their use of the said forty-eight machines, constructed as aforesaid, and from the embodiment and employment therein of the invention and improvements set forth and claimed in the said letters patent, and have thereby greatly damaged and injured your orator and prevented him from acquiring and deprived him of receiving the gains and profits to which your orator has been and is legally and equitably entitled by virtue of the exclusive rights granted and secured to him as aforesaid, and which he would have acquired and received but for the said wrongful acts of the defendants.

To the end, therefore, that the defendants may, if they can, show why your orator should not have the relief herein prayed, and may, under oath and according to the best and utmost of their knowledge, remembrance, information, and belief, full, true, direct,
5 and perfect answer make to the matters hereinbefore stated and charged, and that the defendants may be decreed to account for and pay over to your orator all such gains and profits as have and shall have accrued to them from the said unlawful use of the invention and improvements or any substantial and material part thereof set forth and claimed in the letters patent aforesaid, and that, in addition to the said profits to be so accounted for, the defendants may also be decreed to pay to your orator the damages which he has and will have sustained by reason of the said violation and infringement of his exclusive rights aforesaid, and which this honorable court may assess or cause to be assessed, together with such increase thereof as your honors may see fit to adjudge.

And that the defendants, their attorneys, agents, workmen, and servants, may be perpetually enjoined and restrained by the decree of this honorable court from directly or indirectly using or selling the said machines or any of them so long as the same contain the said improvements, and from making, using, or selling any machine or mechanism whatsoever embracing or embodying the invention or improvements or any substantial and material part thereof set forth and claimed in the letters patent aforesaid, and that the defendants may likewise be restrained and enjoined to the same effect while this cause is proceeding to final order and decree, and that the defendants may be further decreed to pay the costs of this suit, and that your orator may have such other relief as the equity of this case may require and as your honors may deem to be just and right.

May it please your honors to grant unto your orator not only a writ of injunction conformable to the prayer of this bill, and an *interim* injunction to the same effect until further order, but also a writ of subpœna directed to the said Henry B. Metcalf and William McCleery, and commanding them to appear and answer unto this bill of complaint, and to do and to receive what to your honors shall seem meet in the premises.

WILLIAM W. WADE.

B. E. PERRY,
GEO. L. ROBERTS,
Complainant's Solicitors and of Counsel.

6 UNITED STATES OF AMERICA, }
District of Massachusetts, } ss:

At Boston, in said district, on this first day of December, 1880, personally appeared William W. Wade, the complainant above named, and made oath that he has read the foregoing bill of complaint and understands the contents thereof, and that the same is

true of his own knowledge, except such matters as are therein stated on information, which he believes to be true.

Before me—

[SEAL.] SAMUEL W. CREECH, JR.,
Notary Public.

On the eighth day of March, A. D. 1881, the following answer was filed by consent:

Answer. (*Filed by Consent March* 8, 1881.)

The answer of Henry B. Metcalf and William McCleery, defendants, to the bill of complaint of Wm. W. Wade, plaintiff.

These defendants, respectively, by protestation, not confessing or acknowledging all or any of the matters and things in the said plaintiff's bill of complaint mentioned and contained to be true as the same are therein set forth and alleged, for answer to said bill of complaint, admit that on or about the twenty-sixth day of July, 1879, the plaintiff made application to the Commissioner of Patents of the United States for the granting of letters patent to him for certain new and useful improvements in machines for making buttons, and that subsequently letters patent of the United States were issued to the plaintiff, numbered 228,233, dated the first day of June, 1880, granting to him, for the term of seventeen years from said date, the exclusive right to make, use, and vend the said invention throughout the United States and territories thereof.

The defendants, further answering, say that in or about the year 1870 the plaintiff and the defendant, Henry B. Metcalf, formed a partnership for the purpose of manufacturing and selling buttons, and thereafter, to wit, until the first day of January, 1875, did business together in Boston as copartners under the name and style
7 of the Boston Button Company; that after the formation of said partnership, to wit, Jan. 9, 1875, the plaintiff being then the owner of certain letters patent of the United States for improvement in buttons, dated March 23, 1869, numbered 88099; also of letters patent for machines for making covered buttons, dated April 27, 1869, numbered 89450, assigned and conveyed to the defendant, Henry B. Metcalf, one-half of all his, the plaintiff's, interest in said letters patent, said assignment being duly recorded in the Patent Office, at Washington, D. C.; that while the plaintiff and the defendant, Henry B. Metcalf, were doing business together as aforesaid there were made and applied to some of the machines owned and used by said partnership in the course of the business of manufacturing buttons the improvements for which the letters patent named in the plaintiff's bill of complaint were afterwards granted; that said improvements were made and applied to said machines at the cost and expense of said partnership; that said machines, with said improvements, belonged to said firm, and were used and run by said firm in the ordinary course of its business for the use and benefit of said firm and with the knowledge and assent of the plaintiff.

That subsequently, to wit, on Jan. 1, 1875, the defendant, Wm. McCleery, was admitted as a member of said firm, and thereafterwards the plaintiff and both the defendants did business together as copartners under the name and style of the Boston Button Company until the dissolution of said copartnership, as alleged in the plaintiff's bill of complaint, to wit, Oct. 30, 1880.

And these defendants say that at the time the defendant McCleery was admitted as a partner into said firm the plaintiff conveyed to said McCleery thirteen-sixtieths ($\frac{13}{60}$) of the capital stock of said Boston Button Company, and agreed with said McCleery that he would not assent to any disposition of the letters patent Nos. 88099 and 89450, above named, without the approval of said McCleery, and that said Wade would share with the said McCleery any income derived from said letters patent Nos. 88099 and 89450 in proportion to the respective interests of the said Wade and the said McCleery in said Boston Button Company.

That at the same time the said defendant Metcalf conveyed to the defendant McCleery one-thirtieth of the capital stock of said
8 Boston Button Company, with a like agreement as to the disposal of said letters patent No. 88099 and 89450 and the income to be derived therefrom.

The defendants further say that at the time said McCleery became a partner in said Boston Button Company said Wade and said Metcalf, by mutual agreement and with the knowledge of said McCleery, executed a paper conveying to said Boston Button Company full right of use of all privileges granted by letters patent numbered 88099 and 89450.

The defendants further say that at the time that said McCleery became a partner in said Boston Button Company as aforesaid the plaintiff and defendants mutually agreed that of the profits of the company division should be made as follows, to wit, said Wade was to receive one-quarter, said McCleery one-quarter, and said Metcalf one-half, being in the same proportion as their respective contributions of capital; and, furthermore, that, in consideration of services to be rendered as hereinafter stated, said Wade was to receive an annual salary of $1,500, said McCleery an annual salary of $1,500, and said Metcalf an annual salary of $300; that in consideration of said salaries the members of said Boston Button Company undertook and agreed with one another as follows: The said Wade to devote his time and attention to the improving and developing of the machinery used by said firm and to devising new methods and machines for the use of said company in its business, said McCleery to attend to the general management of the business, and said Metcalf to render any assistance he might be called upon to render in the financial concerns of the firm.

These defendants further say that at the time of the formation of the copartnership last named a portion of the capital stock of the firm consisted of certain machines used in the manufacture of buttons, to some of which had been attached and connected, with the knowledge and consent of the plaintiff, the improvements named in his bill of complaint; that when the defendant, Wm. McCleery, was

admitted as a member of said firm, he bought and acquired an interest in all of said machines as a part of the partnership property and in all the improvements connected with said machines and rights pertaining thereto.

9 And the defendants further say that in the spring of 1876, in or about the month of May, said firm, with the full participation, knowledge, and consent of the plaintiff, determined to procure thirty-four (34) additional button-covering machines; that the machines thus ordered were delivered in the factory of the Boston Button Company and placed in use from time to time, to wit, three on Sept. 11, six on Sept. 25, one on Oct. 16, of said year 1876, and all of the remainder prior to May, 1877, on all of which machines were the improvements mentioned by the plaintiff in his bill of complaint; and the defendants allege that, as to the machines referred to in the plaintiff's bill of complaint as covered by aforesaid letters patent numbered 228,233, *that* not only the cost of construction, but also all the risk and incidental heavy expenses of experiment relative thereto, were borne by said Boston Button Company and not by the plaintiff, and that after said machines, with improvements thereon, were built they were all used in the regular work of the firm as partnership property for the use and benefit of said firm and with the full participation, knowledge, and consent of the said plaintiff and without any objection whatever on his part until after the dissolution of said firm.

And the defendants say that the letters patent named in the plaintiff's bill of complaint are invalid and null, because the invention and improvements therein named had been in public use in the United States for more than two years before his application for said patent, to wit, by said Boston Button Company as aforesaid.

The defendants admit that at the date of the plaintiff's application for the letters patent mentioned in his bill of complaint he was and for some time previous had been a copartner with these defendants, doing business with them in Boston under the name and style of the Boston Button Company; but these defendants deny that it was within two years before the plaintiff filed his application and connected the improvements named in said letters patent to machines belonging to said firm; but these defendants say that long prior to the two years preceding said application the plaintiff had applied said improvement to the machines of said firm, and the defendants

10 deny that the plaintiff used said improvements for his now sole benefit and profit, or that said plaintiff ever claimed the right so to use them while a member of said firm, and they say that said improvements were made and applied at the cost and expense of the firm to machines owned by said firm, and from the time they were so made and applied to the machines of said firm they were continually and to the date of the granting of said letters patent and subsequent, and with the knowledge and assent of the plaintiff, used for the benefit and profit of said firm.

These defendants admit that on the thirtieth day of October, 1880, the copartnership between the plaintiff and these defendants

was dissolved by agreement, and that the plaintiff conveyed to these defendants all his interest in the property and assets of every name and nature of said firm, including the good will, and that the plaintiff reserved such right as he then had in and over the improvements attached to the machines of the firm as aforesaid, such reservation being in the terms and words and with the qualifications set forth in the plaintiff's bill of complaint.

These defendants deny that their right to use said machines, with the improvements aforesaid, terminated with the dissolution of said copartnership, and say that as said machines, with the improvements aforesaid, were constructed by said firm and at said firm's expense, with the plaintiff's knowledge and consent, and were in use by said firm prior to the plaintiff's application for a patent therefor, said machines, with said improvements and the right to use them, became a part of the partnership property and passed to these defendants by the conveyance of the plaintiff above mentioned on the dissolution of said partnership.

These defendants admit that subsequently to the dissolution of said copartnership the plaintiff notified these defendants that he denied any and all right on their part, from and after said dissolution, to use the improvements embodied in said machines, and claimed that such use was an infringement on the plaintiff's exclusive right under said letters patent; but the defendants say that such notice was of no effect and could not deprive the defendants of the right already vested in them to use said specific machines with the improvements thereon.

And these defendants deny that they have unlawfully or
11 wrongfully used or are using any machines embracing the improvements contained in the plaintiff's letters patent, and say that they have a right to use the specific machines mentioned in the plaintiff's declaration with the improvements thereon.

All which matters and things these defendants are ready and willing to aver, maintain, and prove as this honorable court shall direct, and humbly pray to be hence dismissed with their reasonable costs and charges in this behalf most wrongfully sustained.

HENRY B. METCALF.
WILLIAM McCLEERY.

HUTCHINS & WHEELER,
Solicitors for the Defendants.

DISTRICT OF MASSACHUSETTS:

FEBRUARY 24, 1881.

This day before me personally appeared the defendants in the aforesaid answer named, who, being by me duly sworn, did depose and say that they had read the aforegoing answer by them subscribed and know the contents thereof, and that the same is true of their own knowledge, except as to those matters therein stated to be on their information or belief, and as to those matters that they believe them to be true.

[SEAL.] WINSLOW WARREN,
Commissioner of United States Circuit Court for District of Massachusetts.

On the eighteenth day of March the following replication was filed:

Replication. (*Filed March* 18, 1881.)

The replication of W. W. Wade, complainant, to the answer of Henry B. Metcalf and Wm. McCleery, defendants.

This repliant, saving and reserving unto himself all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto, says that he will aver and prove his said bill to be true, certain, and sufficient in the
12 law to be answered thereunto, and that the said answer of said defendants is uncertain, untrue, and insufficient to be replied unto by this repliant, without this, that any other matter or thing whatsoever in the said answer contained material or effectual in law to replied unto, confessed and avoided, traversed or denied, is true; all which matters and things this repliant is and will be ready to aver and prove as this honorable court shall direct, and humbly prays as in and by his said bill he has already prayed.

By his solicitors, GEORGE L. ROBERTS.
B. E. PERRY.

12*a* *Final Decree and Appeal.*

This cause was thence continued from term to term to this present term, when publication of the testimony is had and the cause is set down for hearing and fully heard. On the twelfth day of April, A. D. 1883, the opinion of the court is given and the following decree is entered:

Decree. April 12, 1883.

And now, to wit, April 12, 1883, after due deliberation thereon had, it is ordered, adjudged, and decreed that the bill of complaint in this cause be, and the same is hereby, dismissed with costs, taxed at two hundred and ninety-three dollars and forty-eight cents.

From this decree the complainant in open court claims an appeal to the Supreme Court of the United States and gives good and sufficient security that he will prosecute his appeal to effect and answer all damages and costs if he fails to make his plea good, and said appeal is allowed.

A true record.

JOHN G. STETSON, *Clerk.*

13 The following is the evidence used at the hearing of said cause before said circuit court, namely:

Evidence for Complainant, Taken Pursuant to the Sixty-Seventh Rule of the Supreme Court of the United States, in Equity, as Amended, before me, Winslow Warren, Special Examiner.

BOSTON, *Nov.* 28, 1881.

Present: Baxter E. Perry, Esq., and George L. Roberts, Esq., of counsel for complainant; Henry C. Hutchins, Esq., of counsel for defendants.

Counsel for complainant puts in evidence letters patent of the United States No. 228,233, dated June 1, 1880, and granted to William W. Wade for "improvements in machines for making buttons." Same is marked for identification "Exhibit Complainant's Patent in Suit."

Deposition of William W. Wade.

BOSTON, *Nov.* 28, 1881.

Direct examination by GEORGE L. ROBERTS, Esq., of counsel for complainant:

Int. 1. What is your name, age, residence, and occupation, and are you party complainant in this cause?

Ans. William W. Wade; age, sixty-two; Medford, Mass.; machinist and manufacturer; I am the party complainant in this cause.

Int. 2. Of what are you a manufacturer and how long have you been practically engaged in that business?

Ans. Manufacturer of buttons; have been engaged in it twenty-odd years, most of the time.

Int. 3. Are you the William W. Wade named as the inventor and patentee in the patent No. 228,233, of June 1, 1880, marked "Exhibit Complainant's Patent in Suit?"

Ans. I am.

14 Int. 4. Have you here present a model representing the construction of the machine and its several parts described in this patent; and, if so, will you please produce it?

Ans. I have. I produce it.

(The model produced is put in evidence and marked "Exhibit Complainant's Model.")

Int. 5. This patent contains the following statement in the specifications: "My present invention consists of certain improvements upon the machine invented by me, and for which letters patent were granted to me April 27, 1869, by means of which improvements certain defects are remedied and the machine made more effective and less liable to disarrangement." To what extent had you used the machine which was the subject of your former patent of April 27, 1869, when you began to experiment with the view of improving it to cure its defects and to make it more effective and less liable to disarrangemeut, as stated in the patent in suit?

Ans. I had used it to the extent of making plain buttons, and had

six or eight machines in use. I had twelve altogether, but think six or eight were in use. I think I had used them three or four years.

(Counsel for complainant puts in evidence certified copy of letters patent No. 89450, dated April 27, 1869, and granted to William W. Wade for "machine for making covered buttons," and the same is marked "Exhibit Complainant's Old Patent of 1869."

Int. 6. In your patent in suit there is specified as entering into the combination recited in the first claim thereof "The detent or pawl d, upright shaft d^4, lever d^2, flexible lever d^1, vibrating plate b^1, provided with projection b^4 and depression b^3, link c, sliding bar c^1, pitman c^2, strap c^5, and compound eccentric c^3 c^4." What are the offices performed by these several parts and how do they differ from the organization of the machine built under the old patent of 1869, and what practical advantages are attained by the combination just specified?

Ans. The eccentric c^3 c^4, being attached to the shaft, gives motion to the pitman c^5, that gives motion to the sliding bar c^1; by the means of the link c moves the vibrating plate b^1, that moves the pawl b^3, which is attached to the vibrating plate b^2; engages the ratchet wheel b, which is attached to the upright shaft d^4, which is securely fastened in the plate A′, in which the bed dies, so termed, are fixed; the flexible lever d^1 engages with projection b^4 upon vibrating plate b^1; when that engages with this projection upon the vibrating plate it moves upright shaft d^4, upon top of which is fixed the detent d, and at a given time in the operation of the machine brings the detent to engage in some notches in the plate A′, engaging in that notch holds it securely in that plate while it is at rest. The old machine contained a disk about four and a half inches in diameter, and was used both to move and to lock the plate A′. The present detent engages with a plate twelve inches in diameter. The advantage of the present locking arrangement is that it engages with a larger periphery, and is consequently more accurate, as the detent engaging with the small disk any defects in its construction, in its divisions, more than doubled on the plate which contains the bed dies which are required to work very accurately in order to engage with the piston dies. The detent upon the old machine engaged with the small disk referred to, and was held in its place by a spring which bore constantly upon the detent. The present arrangement is what I term a flexible lever, so constructed as to bear only at the proper time on the plate A′—perhaps I should say so as to cause the detent to bear upon the large plate marked A′. This flexible lever or some other mechanism became necessary in consequence of removing the detent from off the small wheel below the bed of the machine and placing it above, so as to engage with this plate A′.

Int. 7. When you set out to improve the old machine what was the main object which you had in view?

Ans. The main object was to make what we term compound buttons, lozenger-shaped buttons, and other thick-edged buttons.

Int. 8. You have mentioned the fact of greater accuracy attained

by the improved arrangement, whereby the detent d engaged with notches in the periphery of the revolving plate A′, which carries the bed dies, and which you say is some twelve inches in diameter, as compared with the arrangement in the old machine, wherein the detent engaged with notches in the periphery of a plate, about four and a half inches in diameter, underneath the bed of the ma-
16 chine. How important was this change for securing greater accuracy of locking for the purposes of making compound buttons?

Ans. I should say it was of the very first importance; it was the very virtue of the machine; it was absolutely necessary; it was because in making a compound button we have to use a compound die, one piece of which is projected through what we term the shell of the button so closely as to admit only the thickness of a very thin piece of cloth—sometimes silk. If it did not pass accurately down through this hole in the shell and carry the edges of the cloth with it the button would not be constructed, or properly constructed.

Int. 9. You have mentioned the further fact that in the old machine the detent which engaged with the notches upon the four and a half inch plate below the bed of the machine was constantly borne upon by a spring. Will you now state the practical advantage of the improved arrangement described in the patent in suit attained by the use of the lever d^2 acting in conjunction with the flexible lever d^1, which devices enter into the combination here under consideration.

Ans. The advantage first is that it removes all the friction which, in consequence of causing the detent to engage with this large plate, would be very much increased over the friction upon the small plate. The old detent upon which the spring bore all the time was not durable; the springs could not be made durable. The large plate A′, into which the detent engages, is left free to assume its position, the pressure being brought upon the detent by means of the flexible lever d^1 was made to enter the notches of the plate just at the time of its coming to rest.

The detent, instead of bearing constantly upon the plate, is kept away by lever d^2, engaging with the vibrating plate b^1, until just at the time when it is wanted to fall into the notch to lock the plate.

Int. 10. What effect would the drag of the detent upon the periphery of the notched plate between the notches tend to have under the tension of such a spring as was in the old machine upon the accuracy of position taken by the bed dies?

Ans. I do not know that it would prevent its accuracy, provided sufficient power was applied to bring the plate into its proper place. The detent could not be allowed to drag upon the periphery
17 of this plate, because there are other notches in this plate which are used for another purpose. The detent would drop into those if allowed to drag upon the plate.

Int. 11. With the understanding from your description that the old machine had a detent performing in some respects the offices of the detent d of the patent in suit, but located underneath the bed of the machine and engaging with notches in a plate specially pro-

vided for that purpose, of nearly one-third the diameter of the bed die plate A′, will you please refer to the enumeration of devices entering into the combination recited in the first claim of the patent in suit and specify which of them were not contained in the old machine?

Ans. The upright shaft d^4, lever d^2, flexible lever d^1, projection b^4, compound eccentric c^3 c^4.

Int. 12. You specify the compound eccentric c^3 c^4 as not being in the old machine. How were the link c, sliding-bar c^1, and pitman c^2 of the old machine moved?

Ans. They were moved by a common eccentric—single eccentric.

Int. 13. What special advantages are attained by the employment of the compound eccentric?

Ans. We are enabled to shorten or lengthen the movements of the parts which actuate or move the bed die plate with the greatest possible accuracy. It was very desirable to move this die plate, which has an intermittent motion, as slowly as possible in starting, and also in coming at rest. Lost motion upon the old single eccentric was necessarily provided in order to provide for the wear of the different connections in this mechanism; also the motion given to the bed die plate A′ would be so sudden as sometimes to jar off the parts placed in the die.

Int. 14. I will now call your attention to the combination recited in the second claim of the patent in suit, which embraces "the piston E and partible die carried thereby, with mechanism to separate the parts of said die when required and hold the same asunder." Will you please explain the construction and mode of operation of the devices here pointed out?

Ans. The piston E is a piston provided to carry a partible die to co-operate with the bed dies. The partible die consists of two
18 pieces, the one of which we designate a clearer, which is made hollow, a separate piece being put into that hollow clearer. Into that piece which is put in we put a piece running out through a slot made in what we term the clearer, so as to connect a bar running from that parallel with the piston upwards, and engages with a double cam, which alternately engages with the bar running upwards, forcing the centre piece below the clearer, the lower end of it, holding it projected below until released by the next upward movement of the piston which turns this cam, so as to bring the depressions in this cam directly over this bar.

Int. 15. If you have here present such a partible die adapted for practical use will you please produce it and explain somewhat more clearly the action of its several parts in connection with the co-operating bed dies to form a compound button?

Ans. I have a compound partible die here, the outside of which we term the clearer, containing a slot, a centre piece with a square bar running outward through the clearer, a depression in the end to receive the rod which runs up to connect with the cam. The centre piece of the die will project itself forward by its own weight unless obstructed; in that case the cam above will project it forward by means of the rod. A compound button is composed of seven parts

or more. The partible die is used for the purpose of making the cover in two parts or setting in what we term the centre cover, the piece in the centre cover. To make this we make a cover with a hole in the centre; we also make what we term a shell with a hole in the centre, which is considerably larger than the hole in the cover; we also make a smaller cover, which is larger than the hole cut in the cover; also another shell, which is prepared to fill the hole in the shell first named. We first take the ring shell, place that upon the bed die provided specially for it (marked "a^2" in the patent in suit). Directly above that ring shell we place the annular cover in a recess provided for it, so that the holes in the annular shell and the annular cover come directly over each other over the shell. The hole in the annular cover being considerably smaller than the hole in the shell, it is then in condition to be operated upon by the compound piston die. The operation of the piston die as it descends carries the centre piece down through the hole, the hole in the ring cover being
19 considerably smaller than the hole in the ring shell, the centre piece of the compound die striking directly upon the cover, which projects in over the hole in the ring shell, carries the edge of the cloth down through the hole of the ring shell, the centre piece being long enough to pass clear beyond the cloth which is carried down through the ring shell. In that condition it is taken off from the bed die provided for it and carried forward to the next co-operating die by means of the center piece, which has been forced through the hole snugly; it then co-operates with the other bed die (designated as a^1 in the patent in suit), the lower part of the button, the eye part, being previously formed in the die a^1. Upon the top of the lower part of the button is placed a centre shell, and on top of this shell is placed a centre cover, when the piston die is brought at rest directly over or on the bed die a^1. While the piston is at rest upon this die we raise the centre part of the bed die a^1 carrying up these parts, also the centre piece of the compound die, until the centre cover and centre shell is forced upward and through the annular shell and cover to any desired height; then the piston die is raised off, the plate is rotated, and the button is left in the die.

Int. 16. The second claim of the patent in suit now under consideration refers to "mechanism to separate the parts of said die when required and hold the same asunder." At what stages of the operation of making a compound button, in the manner you have just described, are the parts of such die required to be separated and held asunder, and at what stages are they required to be not so separated and held?

Ans. They require to be separated and held asunder just previous to its co-operation with bed die a^2, upon which the ring shell and cover are placed; then they are required to be released from this holding asunder just previous to its co-operation with the bed die a^1, in which the button is finished.

Int. 17. Have you any samples of compound buttons made by the employment of such partible die as is described in the patent in suit, the construction and operation of which you have just ex-

plained; and, if so, will you please produce them, and along with them a sample of simple buttons, such as the old machine was capable of making?

Ans. I have, and produce them, both compound and sim-
20 ple. These are samples of plain buttons. (Counsel puts them in evidence and they are marked "Complainant's Exhibit Plain Buttons 1 and 2," respectively.) Here are a couple of compound buttons. (Counsel puts them in evidence and they are marked "Complainant's Exhibit Compound Buttons 1 and 2," respectively.) The Exhibit Compound Button 1 was made with a partible die like the one I have produced. (Counsel for complainant puts in evidence the partible die referred to, marked "Complainant's Exhibit Partible Die.") Exhibit Compound Button 2 was made by a partible die, the acting faces of which were of different shape from those of the Exhibit Partible Die.

Int. 18. Did the old machines which were constructed under your patent of April 27, 1869, contain any partible die such as you have described for making compound buttons up to the time you began to experiment with the view of improving them for the purposes set forth in the patent in suit?

Ans. They did not.

Int. 19. The third claim of the patent in suit specifies as entering into the combination therein referred to "an upright spindle, i, arm i^2, spring i^3, arm i^4, attached to said spindle i, die plate A^1, provided with notches a^6, lever i^1 i^6, cam r, piston E, and sleeve j, having lug i^5, whereby sleeve j is lifted from off the bed die at the proper time to leave the finished button upon the die." Will you explain this mode of operation by which the sleeve j is lifted off from the bed die, and the means employed for doing it, and state what importance the contrivance has in the formation of buttons?

Ans. It was found that in the old machine that a button of any considerable thickness of edge in the finishing process, which we term pressing it, would force it so far into the upper die that meantime the clearer or centre piece of the die, being raised in advance of the outside, operated as a suction to hold the button into the upper die, so that when the outer die was raised it would take the button up with it and carry it forward onto the next bed die; to obviate this difficulty the lifting device was constructed. The first device was the means of holding the outward die at the extreme height to which it was raised by what we call a pressing cam; then,
by means of making the outer die somewhat bell shaped on
21 the inside at its lower end, we were enabled to make buttons that were not exactly flat. Buttons that had any thickness of edge, particularly a square edge, it was found necessary to raise the outer die so far as to allow the centre piece of the die, or clearer, as we term it, to be the last to leave the button on the ascent of the piston, which carried the outside die along with it about half the distance of the ascent of the piston; to accomplish this purpose it seemed to be necessary to connect some mechanism with the main shaft, as the main shaft was in motion while this die was at rest. To accomplish this purpose I put a cam, r, upon the shaft. I then

made a double lever, i^1 i^6, one end of the lever projecting out under spindle i, upon the top of which I placed an arm, i^4, to engage upon a lug, i^5, on the sleeve j. As this arm only wanted to operate upon this lug at each alternate bed die, it was necessary to give it a swinging motion and at the same time an upward motion. The swinging motion was obtained by a spring, i^3, so arranged as to keep the arm i^2 resting upon the bed die plate A'. Into this bed die plate A' I provided depressions or notches a^6, so that just at the time when the piston dies are resting upon the bed die the arm i^4 on the upper end of the spindle i would swing under the lug i^5, in sleeve j, at the same time that the arm i^2 entered the depression a^6 made in the bed die plate A'. The cam r on the shaft G being adjustable on the shaft by means of a set-screw, I was enabled to set the cam so as to operate upon this mechanism and lift the outer or covering die or sleeve j off from the finished button the next movement after it was finished and just before piston E began to rise.

Int. 20. Have you here an outer die or sleeve, such as you have just described, belonging to a working machine; if so, will you please produce it?

Ans. I have and produce it.

(Counsel for complainant puts it in evidence, marked "Complainant's Exhibit Die Sleeve.")

Int. 21. Does the Exhibit Partible Die, which you have heretofore produced, fit the outer die, Exhibit Die Sleeve, so that when the former is introduced concentrically into the latter the whole forms a compound working die; and, if so, will you state further whether the offices of such a die sleeve confine it to co-operation with such a partible die?

22 Ans. It does so fit the outer die, Exhibit Die Sleeve. The die sleeve is used in connection with the partible die or a plain die.

Int. 22. Have you a plain button with edges so thick as to require for successful working a sleeve die having the mode of operation which you have described in connection with the devices mentioned in the third claim of the patent in suit?

Ans. I have and produce it.

(Counsel for complainant puts it in evidence, marked "Complainant's Exhibit Plain Button 3.")

Int. 23. Which of the other buttons already put in evidence require for their successful manufacture the like means and mode of operation?

Ans. Both of the Exhibits Compound Buttons 1 and 2.

Int. 24. Did either of the machines which you had constructed under your old patent of April, 1869, up to the time you began to experiment for the purposes of improving the same, as set forth in the patent in suit, contain an outer die or sleeve having the mode of operation which you have described in connection with the devices mentioned in claim three in the letters patent, or were such old

machines capable of successfully making plain buttons with edges of substantially the thickness of that of Exhibit Plain Button 3?

Ans. The machines did not have such outer die or sleeve having the mode of operation described. Such old machines were incapable of successfully making plain buttons with edges substantially of that thickness.

Int. 25. I now call your attention to claim four of the patent in suit, which specifies the following devices as entering into the combination therein referred to: "The die plate A′, plate *q*, series of sliding plates *m*, each plate having an opening, *o*, and a pin, m^1, in combination with lever *n*, roller *p*, and piston E′." Will you state what offices the devices here enumerated have and what result they effect by their combined action?

Ans. The series of sliding plates *m*, with an opening, *o*, was made to take the place of separate rings by which we performed the same operation, so far as making a certain button was concerned. These rings were made with openings same as opening *o* in the sliding plates for receiving the paper filling of the button. These rings had to be filled, taken by the hand and put onto the bed die a^1 by
23 one of the operators, and taken off after having passed under piston die F′, which is in piston E′. Sliding plates *m* were made to operate automatically, saving not only these two operations of putting the rings on and taking them off, but the rings were exceedingly liable to be put on a little out of place, the rebate, or set edge as we call it, being nearly filled with a piece of cloth which we call tuft or shank, in which case the die would catch the ring under it on its descent, often stopping the machine abruptly; also bruising the ring or die, causing more or less delay of the machine. By means of these sliding plates *m* and their openings *o*, into which paper fillings were inserted, as these operators were relieved from manipulating these rings, thereby enabling them to supply the machine with a greater number of parts belonging to the button in a given time. This enabled us to make a large number of buttons more per day. The lever *n* was attached to the frame and allowed to swing loosely, the lower end held out by a spring so as to pass the inside of the pins m^1 on the plates *m*, when the bed dies came at rest immediately under the piston, with the plate *m* directly opposite the piston die. The piston E′ contains a roller, *p*. The lever *n* being so constructed as to allow the roller *p* as the piston descends to move the upper arm of the lever outwardly, and being opposite the axis upon which the lever is held, causes the lower end of the lever to swing towards the piston die F′, engaging with the pin m^1 which is in the sliding plates *m*, causing it to move under the die just far enough to let piston die F′ pass down its descent through the opening *o* in the plates *m*, the ascent of the piston E′ releasing the lever and allowing the plate *m*, by means of a spring underneath, to return to its proper place.

Int. 26. The patent in suit describes a series of sliding plates, *m*. If there is any variation between the patent and the model, please point it out.

Ans. The model contains but a single sliding plate, which is a fac-simile of each of the plates of the series.

Int. 27. Did the machines built under the old patent of April 27, 1869, contain any such sliding plate or plates before you began to experiment for the purpose of improving the same as set forth in the patent in suit?

Ans. They did not.

24 Int. 28. In the fifth claim of the patent in suit there is specified, in addition to the devices recited in the fourth claim, a "yielding block, n^1, enclosed in a frame which is rigidly attached to the upright B'." What is the particular office of the yielding block n^1?

Ans. The office of the yielding block n^1 was to avoid accident to the lever n^1. Before the yielding block was invented the lever n^1 was attached rigidly to the upright frame B'. In the event of any dirt or any obstruction to the bed die A', with which this general mechanism operated, that it did not return to its place after having been raised to finish the button, it would prevent the sliding plate m from being carried forward; the result of which would be the breaking of the lever n^1, the yielding block, as it is termed, is left free to move, only being held by a spring, n^2, efficiently strong to move the plate under all ordinary circumstances, so that if the plate m could not be brought into place as the piston E' descended, the upper arm of the lever n would be thrown outward and the die would pass along without injury; the next upward movement of the piston and rotation of die bed A' would release lever n^1, and it would assume its natural and normal position without injury. The obstruction, whatever it might be, could be removed before it was required to operate again.

(Adjourned.)

DEC. 16, 1881.

Int. 29. The sixth claim of the patent in suit refers to "the device for alternately holding in a fixed position and releasing the spindle g of the piston die E," etc. What part of the compound die is operated and controlled by this holding in fixed position and releasing alternately the spindle g here referred to, and at what stages of operation in making the button are these acts performed?

Ans. The spindle g is connected by means of a screw pin to the outer part of the die, and is held in an extended position while co-operating with bed die a^2, and is released when co-operating with bed die a^1. The outer part of the die to which I refer is Complainant's Exhibit Die Sleeve.

Int. 30. Explain a little more fully what you mean when you say it is held in an extended position while co-operating with bed die a^2, and what part of the button is then formed.

Ans. Upon die bed a^2 is placed the upper part of the button.

25 First, we place upon the centre of this bed die the iron part technically called the shell, immediately upon the top of that the cover in a recess formed in this die a^2, the shell being of suitable size to fill, together with the cover, this die sleeve mentioned, so

that when held in a fixed or extended position the piston descends and co-operates with bed die a^2 to force itself down over the cover and shell. The centre piece of die a^2, being fixed or stationary, forces the cover and shell into this die or sleeve sufficiently tight to be taken up and carried to the next die on the ascent of the piston, where it co-operates with bed die a^1, in which the bottom part of the button has previously been formed.

Int. 31. Now explain the mode of operation which takes place when the die sleeve carrying the top part of the button co-operates with the bed die a^1, containing the bottom part of the button.

Ans. After taking the cover and shell off of bed die a^2 and carrying it to bed die a^1 other mechanism is brought to bear upon the centre portion of bed die a^1, forcing it upward and co-operating with the upper part of the die sleeve with sufficient force to carry the cloth which is projected in previous to this centre piece being raised and putting the button together and firmly closing the upper part or shell, bending the rim of the part technically called the shell over the collet or lower part to bind the whole together and complete the button.

Int. 32. During this co-operation of the finishing dies, of which the bed die a^1 forms the lower part, is the die sleeve still fixed in position or released?

Ans. Released.

Int. 33. Why?

Ans. That the outer part of the die may be raised up to the proper point to conform with the shape of the button.

Int. 34. And what part of the upper die performs the office of co-operating with the lower die a^1 to close the edges of the shell upon the collet and finish the button?

Ans. Both the outside and inside of the upper die, when brought into its proper place, form an exact mould into which the button is forced by mechanism which raises the bed die a^1, which forces
26 the button into this mould form by these dies to give the desired shape to the button, this shape being given by forcing the shell or turning the shell—the edge of it—over the collet or lower part in a proper manner.

Int. 35. The exterior part of the bed die a^2, which is annular in form, appears by the model to be capable of yielding downward against the tension of a spiral spring, while its cylindrical core appears to be rigid. On the other hand, the annular part of the bed die a^1 appears to be incapable of yielding downward. Is this the mode of construction of the machine described in the patent in suit?

Ans. It is.

Int. 36. Then, if I understand you correctly, when the die sleeve of the upper die, which is attached by its screw pin to the spindle g, co-operates with the yielding annulus of the bed die a^2 it is fixed in position, but when this die sleeve co-operates with the unyielding annulus of the bed die a^1 it is so released as to yield itself. Is this your meaning?

Ans. It is.

Int. 37. The sixth claim of the patent in suit enumerates the following elements as constituting the device for alternately holding in a fixed position and releasing the spindle g, namely, arbor e, ratchet e^1, oscillating chock e^3, its spring and pawl e^2. Will you explain the mode of operation of these contrivances?

Ans. The oscillating chock is suspended upon a pin and allowed to vibrate on the same, so that at each alternate motion of the piston E the lower end of the chock may be allowed to swing directly over the upper end of the spindle g. This fixes the spindle g in the fixed position alluded to, so as to force the die attached to its lower end by means of screw pins down on the bed die a^2, forcing the annular part down. The centre part or core, being rigid by this operation, forces the upper part of the button practically up into the upper die. The next upward motion of the piston E brings the ratchet e^1 into connection with the pawl e^2, which is fixed upon the frame B, the pawl causing the arbor e to turn one-quarter of a revolution, thus bringing the full part of the arbor e, which is in the slot of the piston E, against the chock e^3, thus swinging the lower end of the
27 chock off from over the spindle g, leaving it free to be thrown up while co-operating with bed die a^1, which finishes the button.

Int. 38. What keeps the spindle g and the die sleeve attached to it down, while allowing it to yield upward when the chock is away from its head?

Ans. A recess is formed in the piston E enough larger than the spindle g to admit of surrounding the spindle g with a spiral spring resting upon the lower end or head part of spindle g, the other end resting against the piston itself. Sufficient tension given to the spring will keep the die down in its place.

Int. 39. What is the office of the spring mentioned in claim sixth as belonging to the oscillating chock?

Ans. Spring f is made to bear upon the oscillating chock so as to hold it upon the arbor e, that portion of it contained within the slot or piston E being made of suitable form to give the desired oscillation to this swinging chock.

Int. 40. Did the old machines, built under your patent of 1869, contain means for alternately holding in fixed position and releasing the sleeve of the piston die used for making simple buttons; and, if so, how did such means differ, if at all, from those which you have explained in connection with the sixth claim in the patent in suit?

Ans. The old machines contained the means of holding in a fixed position and releasing the spindle g or the die sleeve, but differed from the present. In the place of the present oscillating chock was a cylinder into which notches were cut at given points, so that by means of the ratchet e^1 and pawl e^2 they were brought into position over the spindle g that it might be released at a proper time by pushing the upper end of the spindle up into the notches, the outer periphery of this cylinder holding the dies mentioned in an extended or fixed position.

Int. 41. What practical advantages are attained by the use of the

oscillating chock mentioned in the sixth claim of the patent in suit instead of the notched cylinder contained in the old machine?

Ans. In the case of the cylinder where the piston dies were co-operating with the bed die a^1 the upper end of the piston g was forced upward into one of the notches of this cylinder in
28 order to release the upper die. In the use of this cylinder, the notches being on both sides of the piston g when it was forced up, the chock could not be revolved until the piston or spindle g had passed down below the outer periphery of this revolving or cylindrical chock. In practice the inner part of the piston die, to be a perfect working die, had to be made to fill the outer die or sleeve, and was not perfect unless it did so fill. In its practical working dirt, lint, or whatever came from the parts of which the button was composed, would work itself into this die and prevent the spring which surrounds the spindle g from throwing it down certainly, the spring being a light one which it required in that case, the spindle g not having left this slot, the chock in its attempt to revolve would come in contact with spindle g. The upward motion of the piston being positive, the pawl e^2 co-operating with the ratchet being also rigidly affixed to the frame B, as it could not revolve the chock, something must necessarily break or be displaced. In the present oscillating chock, it being thrown out on the one side of the spindle, relying in no ways upon the revolution of the arbor e, no harm results to the machine in any way from the disarrangement spoken of by dirt or the some-time bruising of the centre piece or clearer of the upper die.

Int. 42. You have explained the construction and operation of the compound piston die or partible die in connection with the mechanism referred to in the second claim of the patent in suit. The seventh claim of this patent specifies as being in combination with the centre piece h of such compound die the following devices, namely, arm h^1, bar h^2 arbor e, cam h^4, ratchet e^1. Will you explain the operation of these devices in connection with the centre piece h of the compound die?

Ans. In the construction of a compound button this device becomes necessary; it is necessary to hold the centre piece of the partible die in an extended and fixed position at the same time that the outer part is held in an extended and fixed position by spindle g, so that at the same time that the outer part of the die sleeve co-operates with bed die a^2 and forces itself down around the cover and shell, the cover and shell of the compound die being properly prepared, the centre piece of the partible die can be forced down through the shell and also the cover, carrying a certain portion of
29 the inner part of this cover along with it, then co-operating with the bed die a^1, in which the lower part of the button had been formed, and into which had been placed the centre portion of the top part of the button, the latter might be pushed by the yielding motion given by the centre piece of this die alluded to up to or through the annular shell or cover. To accomplish this purpose the bar h^1 was fixed in the centre piece of this partible die, and extending out through both this portion of this partible die and the sleeve

for the purpose of making suitable connection with a cam, h^4, which is fixed upon the end of the arbor *e* outside of the piston E and opposite to the rachet e^1, this cam being so placed upon this arbor as to alternately hold and release the centre piece to which h^1 was attached, the connection being made by a bar h^2, the lower end resting upon the bar h^1, or in a recess made in the bar h^1, and extending upward and being of a suitable length to co-operate with the cam h^4.

Int. 43. You have now explained the improvement of your machine for making buttons as set forth in the patent in suit in respect to the following features, taking them in the order mentioned by the several claims, viz: First, the improved means for rotating and locking the die plate; second, the partible die, adapted for the manufacture of compound buttons; third, the means for stripping the sleeve of the piston die from buttons with thick edges; fourth, the sliding plates, for putting in the filling of the buttons; fifth, the devices for preventing breakage of parts which operate such sliding plates; sixth, improved means for alternately fixing and releasing the piston die sleeve; and, seventh, devices for operating the centre piece of the compound die. When did your experiment end which resulted in the embodiment of all these improvements in practical form, so that the machine was organized completely, as described in the patent in suit?

Ans. This occurred some time in 1878.

Int. 44. What were among the last things which you introduced into the machine in the course of these experiments, and when were they so introduced?

Ans. Without reference to the description of the patent, there was the mode of operating the sliding plates with safety, which consists of the arrangement of the parts which allows the lever *n* to yield rather than break in case of accident or the collection of dirt in the sliding plate *m*, by which it was prevented from coming into its place; also the mechanism which was made to operate the detent *d*, which consists of what I term a flexible lever. These were two things among the last. They were introduced, one of them in about—I couldn't tell when they were perfected; might have been December, 1877, or might have been January, 1878—one of them might have been and probably was later than that; I could not fix the date at which they were finished.

Int. 45. Please now refer to the patent in suit and state in which of the claims you find specified as entering into the combination therein respectively mentioned the devices referred to in your last preceding answer.

Ans. I find the flexible lever d^1 in claim one; in claim five the lever *n* and yielding block n^1.

Direct examination continued by BAXTER E. PERRY, Esq., of counsel for complainant:

Int. 46. State with whom, if any one, you were a copartner at the date of your application for letters patent in suit, and what was the

firm name or style, and where was its place of business, and how long had such copartnership, if any, existed.

Ans. With Henry B. Metcalf and William McCleery; firm name or style was the Boston Button Company; place of business, 88 Purchase street, Boston; the copartnership had existed since 1875.

Int. 47. What had been your duties, general or special, as the case may be, in connection with the said firm's business for two years or more before the filing of the application for such letters patent?

Ans. My position was president of the company; my duties were to manage, control, and dictate the construction department of the business.

Int. 48. State where, if at all, the improvements you have mentioned or described were applied to working machinery, and to what machines and to whom said machines belonged, and for what purpose were such improvements attached, if at all.

31 Ans. They were attached to machines in the company's place of business mainly, which was in 88 Purchase street. They were attached to all the machines practically, forty-eight of them. They belonged to the company and were attached for the purpose of testing and determining their value as improvements, as experiments to determine their practical working.

Int. 49. State for whose benefit said improvements were worked practically, and how successfully or practically they worked—that is, how beneficially or profitably, as well as who received or shared the same.

Ans. They were worked for the benefit of the company, myself and my partners, and the benefits derived from them were very large; they entered into the general construction of the machine to make it work much more rapidly, by which the product was largely increased, the expense of taking care of the machines was largely decreased, the ability to construct other and more profitable kinds of buttons was very largely increased; in fact, there was a certain kind of buttons, and that the most profitable kind, was not constructed until these improvements were applied. The benefit derived from these was shared by myself and partners.

Int. 50. At what expense were the improvements you have mentioned or described made and attached to the machines as they had formerly been and how was said expense paid, and by whom?

Ans. The expense of making and attaching those improvements to the machines was very small; the larger portion of these machines were being constructed; the different improvements that were applied cost certainly no more than the old machines would have cost; the expense of attaching these improvements was borne by the company.

Int. 51. How did such expense compare in amount or value with the actual benefits and profits derived by the firm from the use of the said improvements so attached to the machines?

Ans. If I were going to answer the question to the best of my knowledge and belief I should say it bore no comparison, not more than one or two per cent.; the cost was nominally nothing and the profit derived from them very large.

Int. 52. State whether the said improvements were made
32 and attached and the expense paid as stated with the knowledge, consent, or acquiescence of the firm or its members; state any conversation, if any, concerning this or any correspondence, if any.

Ans. They were all made with their knowledge and tacit consent at least. Little or nothing was ever said in relation to them other than to express their high regard for the inventor of such useful improvements, and no correspondence or agreement was ever made—that is, concerning the making or attaching of these improvements to the machines.

Int. 53. When, if at all, was said firm dissolved and how and whether you made a conveyance to your former partners of certain interests, and whether the copy now submitted to you and marked by the commissioner "Exhibit Dissolution Contract, W. W.," is a true copy of the agreement for dissolution and of such conveyance?

Ans. The firm was dissolved by agreement Oct. 30, 1880. I made such conveyance. The copy submitted I should say was a true copy.

Int. 54. Will you state whether the forty-eight machines mentioned in said instrument just referred to have any connection with the machines you have hereinbefore mentioned; and, if so, what?

Ans. They were the exact machines.

Int. 55. State whether, at the dissolution of the firm, all or any of these machines had on them or connected with them the improvements or any of them you have mentioned in this deposition as being described in the patent in said suit and represented in the Exhibit Complainant's Model.

Ans. They had practically all of them; the whole forty-eight; they were all provided with those improvements.

Int. 56. State whether such machines with said improvements thereon or connected therewith have been used by these defendants since said dissolution, and how lately.

Ans. They have; to the best of my information and belief, they are still in use.

Int. 57. What rights, if any, have you given these defendants or what rights have they acquired, if any you know, to use said improvements as embodied in said machines since said dissolution?

Ans. I have given them no rights whatever of any kind;
33 they have acquired no rights whatever, to my knowledge. I know no rights they have acquired or could have acquired.

Int. 58. What notice, if any, have you given these defendants not to use said embodied improvements, and when and how; and whether the paper now submitted to you and marked by the commissioner "Exhibit Complainant's Notice" is a true copy of same notice given by you?

Ans. I should say this was a true copy of the notice; it was sent to my partners and handed to William McCleery by Charles W. Wade about Nov. 12, 1880.

Int. 59. Note in what way, if at all, you have been deprived of

any and what advantages or benefits by the use of these defendants of said improvements.

Ans. First, by the supplying the trade or making the goods which I should have otherwise made; secondly, at a very low price, very much under the former prices, with the avowed intention of injuring me. I believe they included my family in the injury that should be done me. The present prices of goods which they are making in many instances are from fifty to seventy-five per cent. less than the original price charged, and below any reasonable price to-day.

(Adjourned.)

JULY 10, 1882.

Cross-examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Cross-int. 60. How long have you been in the button business?

Ans. About twenty-five years.

Cross-int. 61. When did you go into business with Mr. Metcalf?

Ans. I went into business with H. B. Metcalf & Co.—I think it was 1868.

Cross-int. 62. Who constituted the company?

Ans. I suppose H. B. Metcalf, Joseph Pierce, and the two Littlefields.

Cross-int. 63. Did that concern carry on the button business?

Ans. Well, I suppose they did.

34 Cross-int. 64. Don't you know what their business was?

Ans. I suppose I do. W. W. Wade was in partnership with H. B. Metcalf & Co. in the button business.

Cross-int. 65. Where?

Ans. The factory was at Winchester. Goods were sold in Boston by H. B. Metcalf & Co.

Cross-int. 66. Did Pierce and Littlefields leave the concern?

Ans. I do not know just what disposition was made, but understood some arrangement was made by which Henry B. Metcalf took their interest in the button business.

Cross-int. 67. When was this?

Ans. When that change was made I could not tell. I was informed of the change some time afterwards. I could not remember now when; two or three years after; possibly more.

Cross-int. 68. When, if ever, did you enter into partnership with H. B. Metcalf alone?

Ans. I don't believe I can answer that question intelligently.

Cross-int. 69. Why not?

Ans. I believe there never was any writings or anything other than conversations which constituted the change in the company. They made such arrangements as suited themselves—H. B. Metcalf & Co. Then Metcalf and myself went on the same as though nothing had happened. Metcalf being the head of the house, I supposed it was all right.

Cross-int. 70. What were your respective interests in this partnership with Mr. Metcalf?

Ans. It was nearly equal. I owned thirty-five seventy-fifths. H. B. Metcalf & Co. owned forty seventy-fifths up to about 1875. At that time the new arrangement was made.

Cross-int. 71. What new arrangement?

Ans. The arrangement of the company as it was when we dissolved. It was virtually a reorganization of the company, when two new partners were admitted, and the firm as then made up consisted of H. B. Metcalf, John T. Ellis, William McCleery, and myself. That arrangement was, I believe, a matter of record. It made us equal partners.

35 Cross-int. 72. Were you ever in business with H. B. Metcalf when he was your only partner?

Ans. I so understood it. I understood he bought the interest of H. B. Metcalf & Co. so that he owned it, and that made him and me partners.

Cross-int. 73. When was that?

Ans. I couldn't tell you. I consented to the arrangement either at the time or after it was made.

Cross-int. 74. Can't you tell how long you were in business with Mr. Metcalf alone?

Ans. I could not, because I do not know just the time when he bought them out.

Cross-int. 75. Can you tell what kind of business you did with Mr. Metcalf?

Ans. I was in the button business.

Cross-int. 76. Where?

Ans. At Winchester; factory there, salesroom in Boston.

Cross-int. 77. Was not your arrangement with Mr. Metcalf, as a partner, in writing?

Ans. I think there was no writing. The change from W. W. Wade, on the one part, and H. B. Metcalf & Co., on the other, I think there was no writing; may have been, but I think not. The arrangement with H. B. Metcalf & Co., there was no writing, I think; I may have forgotten, but I think not.

Cross-int. 78. Was not Mr. Metcalf an owner of one-half of your old patents?

Ans. He is now.

Cross-int. 79. When did he become such owner?

Ans. I can't say that; it's a matter of record. The papers are not here unless Mr. Perry has them. I should say about 1874.

Cross-int. 80. Did you not convey to him an undivided half of the old patents while he was a partner with you?

Ans. I could not tell whether the conveyance was made while the firm consisted of W. W. Wade and H. B. Metcalf & Co. or whether it was after he had bought their interest out. I should think it took place while H. B. Metcalf & Co. were partners.

36 Cross-int. 81. That half interest in the old patents was conveyed by you to Mr. Metcalf, was it not?

Ans. It was.

Cross-int. 82. And he holds it still, so far as you know?

Ans. He does.

Cross-int. 83. Was there not a special agreement between you and Mr. Metcalf in regard to the sale and use of that old patent?

Ans. I think nothing, except that we should not sell without the consent of the other, or something to that effect; that is a matter of record.

Cross-int. 84. Was not that agreement in regard to the sale of the patent in writing?

Ans. I think it is.

Cross-int. 85. Was not this agreement a part of the partnership agreement?

Ans. I think not. The papers will show for themselves. I think they are here. Mr. Perry has them.

Cross-int. 86. Will you please produce a copy of the agreement in regard to the sale of patent?

Ans. I will. (Same is annexed, marked "Exhibit A, W. W.")

Cross-int. 87. Did you ever see this agreement before? (Agreement shown witness, marked "Exhibit B, W. W.") If you have, what is it?

Ans. It is an agreement between H. B. Metcalf and myself in relation to the government of the business of the company.

Cross-int. 88. It is your agreement in regard to your partnership, is it not?

Ans. It is.

Cross-int. 89. Will you produce and annex to your deposition a copy of this partnership agreement?

Ans. I will. (The same is annexed, marked "Exhibit B, W. W.")

Cross-int. 90. That partnership with Mr. Metcalf continued, did it not, until you took in Mr. McCleery?

Ans. I understand the old original agreement was changed at the time this was made; the company was reorganized at that time. This agreement shown me was an agreement to govern the
37 company after McCleery and Ellis were taken in; it is no part of the agreement between Metcalf and myself prior to that time.

Cross-int. 91. When did Mr. McCleery come into the concern?

Ans. At the date of this agreement, Jan. 9, 1875.

Cross-int. 92. Upon what terms did he come into the concern?

Ans. He came in as an equal partner in the business; he and Ellis came in at same time, each owning one-quarter.

Cross-int. 93. What is Mr. Ellis's name?

Ans. John T. Ellis.

Cross-int. 94. And Mr. McCleery's?

Ans. William McCleery.

Cross-int. 95. How much did you own in that new concern?

Ans. I owned one-quarter.

Cross-int. 96. How much did Mr. Metcalf own?

Ans. He owned one-quarter.

Cross-int. 97. How long did that arrangement last?

Ans. I think about five years; until the dissolution at commencement of this suit.

Cross-int. 98. There is nothing said in these partnership articles

about Mr. Ellis or Mr. McCleery, and they are signed only by you and Mr. Metcalf. Will you read the partnership articles and explain how this happened?

Ans. That was a paper made to record how the business should be governed after they came in. All parties, I think, were to assent to that. There may have been other papers made, but I think not.

Cross-int. 99. Did Mr. Ellis and Mr. McCleery both become members of the concern at the same time?

Ans. They did.

Cross-int. 100. And when do you say that was?

Ans. Jan. 9, 1875, the date of that paper.

Cross-int. 101. What became of Mr. Ellis?

Ans. The first I knew he was out, and Mr. Metcalf claimed to have bought his interest.

Cross-int. 102. When was that?

Ans. That's one of the things I couldn't tell.

Cross-int. 103. Didn't you know when he went out?

38 Ans. I did not.

Cross-int. 104. Was there a factory at any time at Medford?

Ans. There was.

Cross-int. 105. Were buttons made there by the concern?

Ans. There was.

Cross-int. 106. For how long a period?

Ans. Two or three years.

Cross-int. 107. From there the business was transferred to Boston, was it not?

Ans. It was.

Cross-int. 108. Was Mr. McCleery taken into the concern before you left Medford?

Ans. Was taken in at the time we left. We began to leave Medford in December, and we were leaving all through the winter, and while we were leaving by that paper there he became a member of the concern.

Cross-int. 109. December of that year?

Ans. I couldn't answer. My impression is 1875; that would make him a member before we left.

Cross-int. 110. I repeat the question, whether Mr. McCleery became a member of the firm before you left Medford, and how long before?

Ans. Upon a little more thought, I think he became a member of the company Jan. 9, 1875, and it was not until December, 1875, that we began to leave Medford. This is a matter of record, shown by our leases in connection with this agreement. I answer merely from recollection.

Cross-int. 111. When you left Medford and came to Boston who composed the firm of the Boston Button Company?

Ans. H. B. Metcalf, John T. Ellis, William McCleery, and myself.

Cross-int. 112. You can't say when Mr. Ellis went out of the concern?

Ans. I cannot.

Cross-int. 113. Are you sure he went out?

Ans. I have Mr. Metcalf's word for it; that's all the assurance I have.

39 Cross-int. 114. Are you sure he went in?

Ans. I am sure he was round there. I am morally sure he was a partner.

Cross-int. 115. What became of his interest?

Ans. Mr. Metcalf says he bought it. Mr. Ellis never told me he had sold out.

Cross-int. 116. Where is Mr. Ellis now?

Ans. I believe he is in business on Summer street, tailors' trimming business. I have so been informed.

Cross-int. 117. When did he leave the Boston Button Company—its employment or service?

Ans. I have no means of knowing.

Cross-int. 118. After Mr. Ellis you say left the concern, what was the proportion of interest then of each partner?

Ans. That's a little complicated. Right there Mr. Metcalf claimed to have bought that interest, while I claimed he had no right to buy it, but it should have been bought in trust for the company, under our agreement.

Cross-int. 119. How did Mr. Ellis get his interest?

Ans. He got his interest by becoming a partner in the concern.

Cross-int. 120. Did you sign anything conveying any interest to him?

Ans. I am not certain about that; Mr. Metcalf was the custodian of all the papers. He came in at same time on the same terms that McCleery did, occupying the same place and upon same terms as Mr. Metcalf or myself.

Cross-int. 121. How long did he remain a partner—a month or a day?

Ans. I couldn't tell. I should say that he was there well nigh three years as a partner; from two to three years.

Cross-int. 122. Can you tell any act he did as a partner?

Ans. I don't know as I could answer the question. The terms upon which he came in was that he was to keep the books, and he did do so. Whether he signed checks or bought or sold goods I don't know that I ever knew.

Cross-int. 123. Was he in the employ of the concern in any way before he became partner, as you say he did?

40 Ans. Not that I ever knew.

Cross-int. 124. How long did he keep the books?

Ans. While he was there; from two to three years.

Cross-int. 125. Do you know whether he was paid a salary while he was keeping books or whether he was paid profits as a partner?

Ans. I know he was to be paid from the profits as a partner; he was to keep the books for the privilege of becoming a partner. This information I got from Mr. Metcalf.

Cross-int. 126. Did you ever have any conversation with Mr. Ellis as to his being a partner in your concern?

Ans. I presume I have, but cannot recollect as to what the conversation may have been.

Cross-int. 127. Did he appear on the books of the concern as a partner?

Ans. I couldn't tell.

Cross-int. 128. Did he sign checks as a partner?

Ans. I have just answered that I do not know.

Cross-int. 129. Do you know why Mr. Ellis left the concern?

Ans. I do not.

Cross-int. 130. And you don't know when he left it?

Ans. No.

Cross-int. 131. And you don't know whether he was paid a salary for his services or profits as a partner?

Ans. I believe I have answered that once by saying that he was not paid a salary, as I was informed by Mr. Metcalf.

Cross-int. 133. Was there anything in writing when Mr. McCleery came into the concern, as to his interest in the old patents?

Ans. I think not. If there are any they will speak for themselves.

Cross-int. 133. Was there anything in writing showing the terms upon which Mr. McCleery was admitted to the copartnership?

Ans. I don't know that I have any papers of that nature; I think there were none. My recollection in the matter is not of clear record. I know a paper was made asking me to assign an interest in the patents to the company embracing Mr. McCleery, but I did not sign it, but I did make a paper conveying an interest to Mr. Metcalf individually.

41 Cross-int. 134. Was there not an agreement in writing, signed by you and Mr. Metcalf, in regard to these old patents and in regard to these partnership relations?

Ans. I think not.

Cross-int. 135. Is the paper now shown you, dated Nov. 1, 1874, signed by you?

Ans. Yes, sir.

Cross-int. 136. Will you please annex a copy of the same in your answer?

Ans. I will.

(The same is hereto annexed, marked "Exhibit C, W. W.")

Cross-int. 137. What does that instrument, dated Nov. 1, 1874, purport to be?

Ans. It purports to be a sale of a certain interest in the business in which I was engaged to Mr. McCleery.

Cross-int. 138. Whether or not Mr. Metcalf conveyed an interest of equal amount with you to Mr. McCleery at the same time?

Ans. He did not.

Cross-int. 139. Whether he conveyed any interest?

Ans. He did. An explanation perhaps had better be made here: Mr. Metcalf and myself owned the entire property, as we understood it; he owned $\frac{4}{7}\frac{9}{2}$ and I $\frac{3}{7}\frac{5}{2}$. In order to convey to John T. Ellis and Wm. McCleery, respectively, each one-quarter of the whole business, it was done by Mr. Metcalf conveying one-quarter of the whole business to John T. Ellis out of his interest. Then, as he owned more than I did, he conveyed the ba lance of what would be his interest to Mr. McCleery, and I conveyed enough from my inter-

est to make up the one-quarter of the whole business. This paper is the result.

Cross-int. 140. Were any papers made for Mr. Ellis?

Ans. I should say there was.

Cross-int. 141. Who made them?

Ans. Mr. Metcalf.

Cross-int. 142. Did you make any?

Ans. I did not; I simply consented to the arrangement made.

Cross-int. 143. What makes you say papers were made to Mr. Ellis?

42 Ans. The papers were all submitted to me to show how the arrangement could be made with the two parties. These are mere memoranda, showing what was afterwards done by Mr. Metcalf.

Cross-int. 144. Did you not deny that these papers were made, a few moments ago, or that there were any papers in writing?

Ans. I should say I did not.

Cross-int. 145. Do you now remember as a fact that papers similar to these or upon the same subject were made with Mr. Ellis?

Ans. These two papers shown to me here were made, as it appears, November, 1874. This was to show the manner in which a conveyance could be made to these two parties; and on or about January 1, as shown by the paper before referred to, the conveyance was made and according to these papers; these papers having been submitted to me, I agreeing to the transfer in that way, and Mr. Metcalf told me he had made the papers. I could not say I ever saw them.

Cross-int. 146. Were any papers ever made by you or Mr. Metcalf with Mr. Ellis similar to those with Mr. McCleery?

Ans. I have answered that I did not see the papers; but if a paper was not made a fraud was committed upon me, and a falsehood besides. I have every reason to believe that the papers were made.

Cross-int. 147. In your agreement with Mr. McCleery you say that you will not assent to any disposition of the old patents without his approval. Did you make any such agreement as that with Mr. Ellis?

Ans. The agreement was made alike with both parties. Personally I made no agreement with Mr. McCleery. This paper was to govern both parties.

Cross-int. 148. Will you please annex to your deposition a copy of the paper executed to Mr. McCleery by Mr. Metcalf, dated Nov. 1, 1874?

Ans. I will.

(The same is hereto annexed, marked "Exhibit D, W. W.")

Cross-int. 149. By virtue of these two papers from Mr. Metcalf and yourself Mr. McCleery became owner of how much in the Boston Button Company?

Ans. One-quarter of the business.

Cross-int. 150. When you left Medford for Boston had you
43 at that time made any improvement in the machinery for making buttons?

Ans. I had.

Cross-int. 151. Had you any machines at Medford in operation with those improvements on?

Ans. They were on the machines when we moved from Medford—certain improvements. I had them at Medford in operation with certain improvements on.

Cross-int. 152. How many machines with improvements?

Ans. I could not say.

Cross-int. 153. Can't you tell whether one or a dozen?

Ans. I can tell there was one; probably more.

Cross-int. 154. Had these machines the same improvements upon them before you left Medford that the improved machines now in use have on them?

Ans. If the question means the improvements patented in 1880 I would say no. Possibly one or two of the improvements might have been on—that is, special pieces.

Cross-int. 155. You say that some machines had improvements on before you left Medford. Now, will you state what improvements were on those machines that were covered by your last patent?

Ans. I think substantially what I term the device for lifting was on, and what we term the feeding plate—that is, not in its present form; that's all, I believe.

Cross-int. 156. Do you swear that those were all before you left Medford?

Ans. No; I shouldn't be willing to say that those were all; those are all I think of.

Cross-int. 157. Now, I will ask if every improvement covered by your last patent was not on two machines before you left Medford?

Ans. I will swear it—yes—upon a stack of Bibles as high as this building.

(Adjourned.)

JULY 12, 1882.

Cross-int 158. Will you state which of the improvements covered by your last patent was not on the two machines when you left Medford?

44 Ans. I can state certain ones that were not on—those that were put on after we came to Boston. I believe I stated what was on before I left Medford. The balance I should have to refer to the patent, as I cannot carry them in my mind.

Cross-int. 159. I repeat the question.

(Witness examines a copy of letters patent.)

Ans. It will take considerable time to answer. The flexible lever was not on, and what I designate as the yielding block, frame, and spring, and the present device for alternately holding and releasing the spindle *g*. The compound piston die having a movable centre was not on in its present form. That's all I will enumerate.

Cross-int. 160. Have you any means of stating when those improvements were added to the two machines?

Ans. I should have to ask which two machines. (Counsel states he refers to the two at Medford.) Every machine that was built prior to leaving Medford was altered in some way after we went to Boston, so that not a machine remains to-day as when we left Medford. I can only say a large portion of the machines were built after going to Boston; the old machines which were built prior were altered over to correspond to the newer or later ones. (Question repeated.) I can say that certain improvements were added some time during 1875, some during 1876, some during 1877, and some during 1878. I have no means, except from recollection, as to the entire lot of those improvements, but have the means of knowing as to some of them, and can state about the time. The flexible lever, so designated there the first perfected one that was put on, was put on after Oct. 11, 1877. The yielding block, swinging lever, spring, and frame was put on after Dec. 3, 1877. I know this, because they were made outside the factory and are charges on the books of the concern that built them. These charges were Oct. 11 and Dec. 3, and they were put on some time after that by us; can't tell whether two weeks or two months, but as soon as our mechanics could be spared from their regular work to put them onto the machines. The other improvements which I speak of I have no data other than from recollection.

Cross-int. 161. No data other than recollection. Have you any recollection? If so, give it.

45 Ans. My recollection is we moved into Boston December, 1875—that is, the fall and winter of 1875–'6. The leases, etc., will show. It was after we went into Boston that I built the later machines—I think thirty-four. These were not all built at once, but built in small lots. My recollection is that the first lot built was six; that these were built part by one firm and part by another, brought to our factory and finished in our factory, and as these machines were finished changes and alterations were made. I cannot say when the first lot was delivered. That is a matter of record on our books and the books of the builder, the date of which I have not. It was some time in the summer of 1876. It might have been early, but cannot fix the date of their delivery, which was at different times. The machines were all finished in our shop, and none of them out of it.

Cross-int. 162. What was the condition of these two machines at Medford when Mr. McCleery was taken into the concern?

Ans. They lay in the shop as cast iron; they were being built.

Cross-int. 163. At the time he was taken into the concern as a partner, will you swear that these two machines were not completed at Medford and taken in the account of stock?

Ans. My answer is that they were not completed; that they were taken in the account of stock in the condition in which they were. I will say, in relation to these machines, further, that they were built precisely like the old machines in their general construction, only they were built larger for the purpose of building larger but-

tons, as the old ones were not large enough for large buttons and were not designed for it. Alterations and improvements were made upon these machines which were only mechanical, and are not embraced in the patents of 1880; were put into operation some time during the fall of 1875. Only one was put into operation before we left Medford. After these machines were put into operation in Medford there were some changes made in one of them as an experiment. I believe upon these two machines referred to the feeding plate was not attached. I think the arbor *e*—one arbor—was built; put on there as an experiment. That was put on just before we went into Boston. I think that is all the improvements put onto that machine that is covered by the patent of 1880. That is my recollection.

46 Cross-int. 164. When you moved to Boston how many machines had you and how many did you take to Boston?

Ans. We had twelve old ones, as they are termed, and the two that have been particularly referred to, called new ones; and we took them all to Boston.

Cross-int. 165. How many were there when you sold out your interest in the concern and dissolved?

Ans. Forty-eight, I believe, including the fourteen above referred to.

Cross-int. 166. When you sold out and the concern was dissolved were these improvements under your last patent then on all the machines?

Ans. They were not all on all of the machines.

Cross-int. 167. How many machines were they all on?

Ans. I don't believe I could tell. My recollection is some fourteen or fifteen contained them all; the others had not been completed.

Cross-int. 168. Can you say which of these improvements were not on any of the machines?

Ans. They all had more or less of the improvements on. The feeding plates were only on a few; how many I will not say; it is a matter of record; I should think there might have been twenty. I would say that these feeding plates, as they are termed, were only used for certain kinds of buttons. They are so constructed as to be used upon any of the machines—that is to say, those which were constructed for the new machines could be used upon any of the new machines, and those constructed for the old machines could be used on any of the old machines. They were made to fit anywhere, wherever they chose to put them, and then could be taken off and put one side. The machines run on a certain kind of buttons without them. The swinging lever, yielding block, and frame were only applied to work with these feeding plates; could be used with any machines with the same ease as the feeding plate.

Cross-int. 169. That is to say, it was not necessary to have a complete rig of all these improvements?

Ans. Not for certain kinds of buttons.

Cross-int. 170. When, then, you say that some of the machines did not have all the improvements, you mean that it was not

47 necessary for some of them to have all, because you could adapt one to another?

Ans. The nature of our work was such that the feeding plate was not needed for some kinds of buttons. They were adapted to all the machines.

Cross-int. 171. The machines were all completed so far as they were ever intended to be for these improvements?

Ans. I should have to say they were, if the work should ever turn so as to require them all. At the same time they were all adapted to be used.

Cross-int. 172. These forty-eight machines and the improvements thereon were all made by the Boston Button Company, or at its expenses, by Wade & Metcalf, Wade, Metcalf & McCleery, or the concern before that you spoke of?

Ans. The twelve old machines were made by W. W. Wade. The balance were made by the Boston Button Company. The twelve old ones were sold to the Boston Button Company by W. W. Wade.

Cross-int. 173. Then the Boston Button Company, consisting of Messrs. Wade, Metcalf, and McCleery, purchased the twelve old machines and built the rest?

Ans. They did. The twelve old ones were sold by W. W. Wade to H. B. Metcalf & Co. before McCleery and Ellis came in, and afterwards came to the Boston Button Company.

Cross-int. 174. You say before Mr. Ellis came in. What do you mean by that? When did Mr. Ellis come in?

Ans. In 1875—the same time McCleery did.

Cross-int. 175. How did he come in?

Ans. The same way Mr. McCleery did.

Cross-int. 176. When did he go out?

Ans. I couldn't tell you.

Cross-int. 177. He was a partner of yours, wasn't he?

Ans. He was, I suppose.

Cross-int. 178. And yet you didn't know when he went out?

Ans. I did not—that is, the day.

Cross-int. 179. Did you sign the bill of complaint in this case?

Ans. I did.

48 Cross-int. 180. Did you swear to it?

Ans. I did.

Cross-int. 181. How did it happen that in that bill of complaint you said nothing about Mr. Ellis, but only about Mr. Metcalf and Mr. McCleery as your partners?

Ans. It was because I supposed Mr. Ellis had gone out. Mr. Metcalf told me himself that he had bought him out. I know that at the taking account of stock Mr. Metcalf gave me a paper showing the profits of the concern divided between himself and Mr. McCleery and myself, placing to his credit one-half of the profits of the concern. I demurred to his having one-half of the business to Mr. McCleery, and asked an explanation. He told me Mr. Metcalf had done that for the purpose of securing Mr. Ellis's property, to keep it away from parties in New York who were prosecuting a suit in which they supposed Mr. Ellis was liable.

Cross-int. 182. In your bill you alleged that you had a partner-

ship with Mr. Metcalf and Mr. McCleery alone, and say nothing about Mr. Ellis ever having any business with you. How is that?

Ans. Simply I understand he had gone out, and it was not necessary to put that in. As our company was once organized under the statute and was run for some years and was dissolved by the court I did not think it necessary to name that fact in the bill of complaint.

Cross-int. 183. You have stated and sworn in your bill that you became a partner with Metcalf and McCleery alone, and said nothing about Mr. Ellis being a partner. If that was a fact and you knew it why did you not state it?

Ans. I simply say I had the evidence that Mr. Ellis had ceased to be a partner before the bill was made.

Cross-int. 184. Did you have a salary in this concern?

Ans. Each of the partners had a salary, except Mr. Ellis.

Cross-int. 185. Did you have a salary?

Ans. Each of the partners drew what we termed a salary, a certain amount per annum, and as I was a partner I drew the same as the rest.

Cross-int. 186. What was your salary?

Ans. One thousand dollars a year part of the time; part of the time twelve hundred; part of the time fifteen.

49 Cross-int. 187. And in addition to that one-quarter of the profits of the concern?

Ans. After McCleery came in it was one-quarter of the profits.

Cross-int. 188. Were the salaries all equal in amount?

Ans. They were not. I drew fifteen hundred; McCleery fifteen. Metcalf was allowed three hundred dollars.

Cross-int. 189. What was this salary allowed to you for?

Ans. For filling the presidency of the Boston Button Company, and I was paid a salary for that. Mr. Metcalf was treasurer, and he was paid for that. Mr. McCleery was to do the business of buying and selling goods and take charge of the books, and was paid a salary for that. Mr. Ellis received no salary, but was to consider it a compensation in being allowed to invest his money in the business and render such assistance as Mr. McCleery might need.

Cross-int. 190. What do you mean by saying that you were president of the company?

Ans. I mean just what the word implies under the statute. The office was created as well as that of treasurer and clerk. We continued to operate on the same general plan after we ceased to be a corporation. My business as president was to manage the mechanical part of the business, manage and hire the help, construct the buttons, make dies for the construction of different kinds of buttons, as I was the only man of the concern that had any skill in the manufacture of buttons.

Cross-int. 191. Won't you explain how that came to be your business as president?

Ans. I should think that the explanation was sufficiently clear to say that I was the only man in the concern that had ever had any

practical experience or any skill in the manufacture of buttons. This devolved upon me as a necessity.

Cross-int. 192. Won't you state whether Metcalf, Wade, and McCleery were partners in business under the style of the Boston Button Company or whether there was a corporation?

Ans. In business as the Boston Button Company as partners, There was no corporation then.

Cross-int. 193. When did the corporation cease, or was there
50 any corporation at any time while you and Metcalf and McCleery were partners?

Ans. It ceased prior to our partnership; I couldn't tell when; it is a matter of record; that is my recollection now.

Cross-int. 194. What, then, do you mean by talking about being president of this partnership and having a salary as president?

Ans. I mean that I was called the president; might as well have been called something else, so far as the business was concerned. I received a salary for doing what I have explained; it seemed to fall naturally to me. I was not hired, but managed the business as a partner—that is, that portion of the business which, as I have explained, fell naturally to me.

Cross-int. 195. In fact, then, there was no corporation, no president, and no treasurer during this period?

Ans. I have answered that once by saying that we chose to continue to use the same names as before when there was a corporation as a matter of convenience. I know of no other reason. (Question repeated). Only as we chose to call each by that name. I don't know that they had any legal existence or significance, as we continued to perform the same duties we performed before we passed under the same name.

Cross-int. 196. You have stated it both ways, that you had a salary as president and a salary as partner. I would like to know which it was.

Ans. I did not know that I had stated I received a salary as a partner. I received a salary for spending my time there and directing the work. I was partner and was called president. I do not care upon which it was paid.

Cross-int. 197. You say there was no corporation. How could you be president of it, then?

Ans. I have answered I do not know I was legally, but I was by common consent, by agreement of the company, the partner; that's all. I believe that it is as much the custom in copartnerships as in corporations.

Cross-int. 198. What is?

Ans. To have a president. What I mean to say is that these men are designated as president and treasurer.

51 Cross-int. 199. Do you mean to say that you had a salary of fifteen hundred dollars by agreement of your partners as president of the company or of the corporation?

Ans. I don't know how I can make it clearer than I have already made it. I mean to say that it was agreed that each should draw a certain sum of money for living purposes out of the concern. No

particular duties were assigned to me, as I was a partner owning one-half of the business in the first place, a manager, and did whatever in my own judgment was for the best interests of the company or I might do believing it to be for the best interests of the company. It was nobody's duty or anybody's privilege to tell me what I should or should not do as manager of that concern.

Cross-int. 200. You had entire charge of the machinery, did you not?

Ans. The business was divided as I have explained. I have explained that my business was to manage the manufacturing, which embraced the entire charge of the machinery. I did have entire charge of the machinery.

Cross-int. 201. And you made and suggested improvements from time to time?

Ans. In the manufacture of buttons I did.

Cross-int. 202. Did you manufacture anything else?

Ans. I believe not; I am not certain.

Cross-int. 203. Were not every one of these forty-eight machines before the dissolution from time to time in actual use in the manufacture of buttons?

Ans. I think they were not. Some few of them had not been completed.

Cross-int. 204. Wherein had they not been completed.

Ans. I mean that they had not been put in operation, I think.

Cross-int. 205. You say a thing hasn't been completed if it hasn't been in operation, do you?

Ans. The question was had they been in operation. My answer was they had not been completed for operation. They had not been belted up. I would not say positively they had not been in operation, but I think they had not.

Cross-int. 206. You admit now that all these machines
52 were completed, ready to be used, as fully as they ever were intended to be?

Ans. I admit so far as certain improvements were concerned—that is, the patented improvements. I have said the improvements were not all on, but there were some on them all.

Cross-int. 207. What do you mean by selling forty-eight machines to them or your interest in them when you sold out?

Ans. I don't know that I know how to answer the question to suit Mr. Hutchins. I sold them as they were at the time.

Cross-int. 208. Can you state and describe how those forty-eight machines were at the time you sold them?

Ans. I could not, as the improvements consisted of something like fourteen or fifteen in number. Certain improvements were upon all. I could not tell just how many of these improvements were upon some of these machines, the last ones brought into the factory. A part of the machines had all of the improvements on. All the rest had some, but not all.

Cross-int. 209. Do you know whether they have got them on now?

Ans. I don't know whether any have been put on since.

Cross-int. 210. Did you have actual charge of the machinery down to the dissolution?

Ans. I had down to the time I left, some time before the dissolution, before the bill was brought; I couldn't tell the date.

Cross-int. 211. How long before the dissolution did you have charge of this machinery?

Ans. I went away before the dissolution; it might have been three months before; it might have been six; it was some time before. I couldn't tell the date.

Cross-int. 212. You had no charge of the machinery, then, for some time before the dissolution?

Ans. I had not. I did not claim to have.

Cross-int. 213. Can you give now the date of the dissolution, month or year?

Ans. It is a matter of record. I cannot give it at this moment. I can by reference to the record.

Cross-int. 214. I must ask you again whether these ma-
53 chines that you released your interest in at the dissolution were not all used before that in the manufacture of buttons?

Ans. I don't know how I can answer different than that I think they were not, and yet they might have been. As my son had charge of these particular machines, as to the particular fact as to whether they had been run or otherwise I could not say, but think they had not.

Cross-int. 215. Who made the castings of those two machines made at Medford?

Ans. I think the castings were made by the American Machine Company of Boston. I think their foundry was at Woburn.

Cross-int. 216. Who ordered them?

Ans. I would not say whether I ordered the castings. I may have allowed the man who made the patterns to take them and order the castings, as is commonly done. The work done which was necessary to have done outside of our shop, that portion for which we had no suitable tools, I think was done by the same man that built the patterns. He may have ordered the castings and taken them directly to his place and fitted up the frames as we say, and we did the rest in our shop.

Cross-int. 217. Who paid the expense of the construction of the two new ones, the alteration of the twelve old ones, and the construction of the thirty-four new ones after you came to Boston?

Ans. The company paid it.

Cross-int. 218. Who paid the expense of altering the twelve old ones?

Ans. The Boston Button Company, composed of myself, Metcalf, McCleery, and Ellis. The old machines were the last thing to be altered over after the new ones were built.

Cross-int. 219. Who paid the expense of the construction of the thirty-four new machines?

Ans. By the same parties—the Boston Button Company, of whomever it was composed.

Cross-int. 220. Who had the profits and benefits of the business and manufacture of these various machines?

Ans. The Boston Button Company, composed of Messrs. Metcalf, Ellis, McCleery, and myself.

54 Cross-int. 221. You sold out your interest in the Boston Button Company to Messrs. Metcalf and McCleery in the fall of 1880, did you not?

Ans. I think that was the time.

Cross-int. 222. What did you get for your interest?

Ans. $12,000.

Cross-int. 223. Did they assume all the debts of the concern?

Ans. They did.

Cross-int. 224. You released to them all your interests in these forty-eight machines, did you not?

Ans. That's a matter of record showing what I did release.

Cross-int. 225. You released your interest in all the property of the concern and they assumed the debts; is that it?

(Objected to.)

Ans. The papers will show just what I released, as it was in proper form.

Cross-int. 226. Did you execute any paper of release to the concern?

Ans. I did.

Cross-int. 227. What was it?

Ans. A paper of release.

Cross-int. 228. Have you a copy of it?

Ans. My counsel has it.

Cross-int. 229. Will you produce it and annex it?

Ans. It is already annexed, marked "Exhibit Dissolution Contract, W. W."

Cross-int. 230. Is Exhibit Dissolution Contract, W. W., a copy of the agreement you signed?

Ans. I should say it was.

Cross-int. 231. Have you read the second clause of the agreement; whether by that did you release to your partners, Messrs. Metcalf and McCleery, all you interest in the partnership assets and good will of the Boston Button Company?

Ans. It so reads.

Cross-int. 232. If your partners, Messrs. Metcalf and McCleery, were never again to use those machines you released your in-

55 terest in, wouldn't you think $12,000 rather a high price for your interest in the assets?

Ans. No, sir.

Cross-int. 233. Are you in business now?

Ans. I am indirectly interested in the button manufacturing business in Chardon street, Boston, as partner. My son is in the business, and I am indirectly interested with them, as a partner, I suppose. Parties by the name of Hough, Rumney, and Champney are interested with them.

Cross-int. 234. Are you using the same kind of machines in

Chardon street that the Boston Button Company used before the dissolution?

Ans. The same kind.

Cross-int. 235. And do you make the same kind of buttons that they make?

Ans. I do.

Cross-int. 236. How long have you been making buttons since you left the Boston Button Company in Chardon street?

Ans. I should say about a year.

Cross-int. 237. How many machines have you there?

Ans. Six of the kind used by the Boston Button Company.

Cross-int. 238. You stated that the twelve old machines which were at Medford you sold to the Boston Button Company. Is that true?

Ans. Perhaps I had better give the transaction as it occurred. The facts were that I was engaged in the manufacture of buttons. I had a partner; I bought my partner's interest; then I was alone. I then united my interest with the firm of H. B. Metcalf & Co. I am not quite certain whether that took in six machines and we afterwards bought six more, but I think that took in the twelve. This property was scheduled, and H. B. Metcalf & Co. put in a sum of money a little more than equal to the sum at which the property was scheduled, embracing the twelve old machines. This formed the Boston Button Company, which was organized under the statutes of the State.

Cross-int. 239. Will you please consider and answer at your
56 next coming whether these twelve machines or a portion of them were not purchased of an outside party?

(Adjourned.)

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Ans. I should answer that by saying they were not. If an explanation is desired I will give it extensively.

Cross-int. 240. How did the firm come by these twelve machines?

Ans. They came to them with a lot of other property from the American Button Company, a corporation.

Cross-int. 241. All of them?

Ans. No, sir; six of them.

Cross-int. 242. Where did the other six come from?

Ans. Came from W. W. Wade. I owned six of them.

Cross-int. 243. From the time you came to Boston to the date of your dissolution with Metcalf and McCleery and since, there have been other button-makers in New England than you and the Boston Button Company?

Ans. I understand so.

Cross-int. 244. What others?

Ans. The names as known to me: One at Springfield, known as Newell Bros. Manufacturing Company; one at Easthampton, known as the International Button Company; one in Connecticut, known as the Scoville Manufacturing Company, at Waterbury. That's all in New England known to me.

Cross-int. 245. Were these establishments large or small?

Ans. They are large.

Cross-int. 246. Did they make the same kind of buttons substantially as you manufactured?

Ans. They did or do.

Cross-int. 247. Do any of these persons use the devices embraced in your later patents?

Ans. Not to my personal knowledge.

Cross-int. 248. Have you any reason to suppose that some of these parties are using the devices covered by your last patent?

Ans. I have heard that which leads me to suppose that they are infringing my patents, but do not know certain, as button-
57 makers never visit each other's establishments unless it is done surreptitiously; by this I mean they are not held open.

Cross-int. 249. What has led you to think that any of these parties are infringing—the product of their work or information?

Ans. The first is information; in some cases I think I can tell by the product.

Cross-int. 250. Will you state which of these you have reason to believe are infringing upon the device in your patents?

Ans. Perhaps I should state here that there is another firm, which I have not mentioned, who manufacture, because I did not know certain concerning the firm; this firm I do not know whether it is located at New Haven or West Haven, but the head man of this firm was once in my employ; this firm the name of which I do not know. The party that worked for me is named Reed. I was told by a man that used to be a button-maker in New York or Brooklyn that he was in this place with which Reed is connected; that he saw in their place machines that looked like mine. The firm at Easthampton, known as the International, is one that I suspect by information. The Scoville Manufacturing Company of Waterbury I have reason to suspect of using the same devices. I suspect the firm of Newell Brothers, at Springfield, are using the same.

Cross-int. 251. Are there button factories out of New England also?

Ans. There are.

Cross-int. 252. Have you any reason to suppose that any of these manufacturers of buttons out of New England are infringing upon your patents?

Ans. I have not; cannot say I have.

Cross-int. 253. Do these parties out of New England make the same kinds of buttons in a different way?

Ans. They do. Perhaps I might add that since my inventions were made quite a number in New York and out of New England have gone out of the business of button-making, several of which have told me since they went out that they went out in consequence of being unable to compete with my improved machinery.

Cross-int. 254. Have there been at the same time other parties come into the business?

58 Ans. I cannot say that there have.

Cross-int. 255. Are there not large foreign importations of buttons of the same kind substantially as made by you?

Ans. I understand not.

Cross-int. 256. You said in some of your answers that the partners of your firm had salaries in addition to their profits; what was the amount of Mr. McCleery's salary?

Ans. What I meant by salaries I meant to say that it was agreed that they should draw so much for living. The amount was limited, as I stated before, to fifteen hundred dollars in Mr. McCleery's case, fifteen hundred in my own case, three hundred in Mr. Metcalf's case, which was all.

Cross-int. 257. Was Mr. Metcalf limited to three hundred dollars as the amount he could draw for his support?

Ans. I answer, he was. In other words, the sums were a matter agreed upon. Profits and dividends were not known until after these sums were paid. Further sums were not to be drawn except upon special agreement, and not then except *pro rata;* I think that was the agreement. I will say that these facts, whatever they may be, are found in a paper which is known as articles governing the action of the partners on this matter.

Cross-int. 258. Is that paper that you refer to in the case now?

Ans. I think it is. It has been shown to me here. I may be mistaken about its being in the case.

Cross-int. 259. Will you please produce a copy of the paper that you refer to and make it a part of your answer?

Ans. I will. I find upon examination it is already in, marked Exhibit B, but does not contain the agreement as to salaries.

Cross-int. 260. Please examine it and say if it does not contain a provision that no money shall be drawn by either partner without consent.

Ans. It does; none except for salaries.

Cross-int. 261. This partnership agreement, then, does not define the amount of salaries, does it?

Ans. It does not. The salaries were otherwise agreed upon.

Cross-int. 262. Please state whether the agreement as to salaries was in writing or verbal.

59 Ans. I had supposed it was in writing, but do not know that I have a copy. I remember distinctly how and under what circumstances this agreement of salaries was made.

Cross-int. 263. You supposed the amount of salaries was fixed in the partnership agreement, did you not?

Ans. I did.

Cross-int. 264. Are you aware of any other agreement in writing upon the subject than the partnership agreement put in?

Ans. I do not know that there are other papers. Our usual custom was to agree upon certain things to be done. The result of the agreement, whatever it might be, was left to Mr. Metcalf to put into writing or not, he being the custodian of all the papers. I did not take the pains to ascertain whether they were left as oral agreements or reduced to writing.

Cross-int. 265. Was your son at any time a member of the firm with Metcalf & McCleery or upon a salary?

Ans. He was always upon a salary; at one time was given some stock when concern was a corporation. He was never a member of the firm with Metcalf & McCleery.

Cross-int. 266. What was his occupation in the firm of Metcalf & McCleery?

Ans. He was an overseer in charge particularly of what we term the covering department, which embraced the machines in this suit, and a general oversight of the other departments of the manufactory.

Cross-int. 267. Had he any practical knowledge or skill as a machinist?

Ans. He had.

Cross-int. 268. Was he capable of superintending and managing the machinery and work?

Ans. Under my direction he was. He had under his immediate charge the employés upon these machines, including the mechanics employed to do the general repairs, which consisted in making dies for new buttons, repairing the machines in case of accident, making or fitting the various improvements which were made by me upon these machines as they were made from time to time. As these improvements were constant and steady experiments he was consulted with as to the best manner of applying and making and also conducting the experiments as they were made upon each improvement as we went along, such as adjusting, fitting by boring holes, filing here and there upon the piece that was to be applied to the machine, so that they might work as designed.

Cross-int. 269. What was the amount of your son George's salary?

Ans. I shall have to answer I do not know. His salary was a private agreement betwixt himself and Mr. McCleery. I inquired what that salary was. He told me it was an agreement betwixt him and McCleery, and if it was all the same to me he would prefer not to tell. I considered it all right and passed it by, or rather did not learn.

Cross-int. 270. He had a salary and it was paid by the firm, whatever it was?

Ans. He was in the employ of the firm either upon salary or wages, I do not know which, and paid by them.

Cross-int. 271. You have defined your son's duties that he discharged. Was he in the service of the firm of Metcalf, McCleery, and yourself throughout its existence?

Ans. He was in the service of the firm from its formation to its dissolution.

Cross-int. 272. You have stated his duties and what he did. Will you now state what you did yourself?

Ans. I had no defined duties. I had the entire charge of the manufacturing department, constructing of the dies, constructing of the buttons, and adapting one piece to another. Buttons were composed of many parts. I might add that I was there a great part of the time, not only directing others, but with my coat off. If there

was anybody there that could not do the work in the department referred to or any department of the establishment I took hold of that and did it with my own hands to show them how, as I was a practical machinist and builder and adjuster and inventor of machinery, particularly in the line of the manufacture of buttons. I directed the building of new machinery. I made inventions. I applied or caused to be applied to the machinery the various improvements that were made, not only upon the machinery in this this suit, but I built or caused to be built various other
61 machinery, which I termed supply machines. These machines were of my own invention, made by me or at my direction, improved from time to time as new styles and kinds of buttons were required by the market. For instance, what we termed the old machines would make a very limited number of styles of buttons that we called plain, and as a new style complex in its character was required by the market I made and applied to these machines various improvements to meet this demand of the market.

Cross-int. 273. All this was done at the factory or manufactory of your firm, and at the expense of the firm?

Ans. It was done at the expense of the firm, under my direction, at the factory or elsewhere.

Cross-int. 274. Were the improvements covered by your patent of 1880 put upon the twelve old machines under your direction?

Ans. They were put on under my direction and at the expense of the firm.

Cross-int. 275. The thirty-four new machines which were built after you came to Boston, with the improvements, were built under your direction also, and at the expense of the firm?

Ans. They were.

Cross-int. 276. Will you please state, as shortly and distinctly as you can, what was done outside and what in your own factory in the construction of these machines?

Ans. What we termed the frames of the machines were constructed outside by contract, brought to our place and there put together—I think the proper word is assembled. That was done by us and by us put in operation.

Cross-int. 277. This outside work was paid for by the firm?

Ans. Yes, sir.

Cross-int. 278. The matter of the repairs, I suppose, was also done in the factory, speaking generally?

Ans. It was.

Cross-int. 279. You have stated that buttons were made and are still made without your improvements. Can all the kinds of buttons be made by the old system that are made by the new?

Ans. They can.

Cross-int. 280. Whether the buttons made by the old machines were as good when made?

62 Ans. When made as good as they could be they were just the same; no difference. I myself have made all kinds upon the old machines that were ever made by the new.

Cross-int. 281. The advantage, then, in button-making of your

improvements would be in facility, saving of expense, increase of quantity, or what would you say was the exact advantage of your improvements?

Ans. I would say that where a large quantity of buttons are designed to be made—for instance, 4,000 gross a day, which was the calculation made in the construction of our works—the cost of the plant would be probably not over fifty per cent. of the old plant. The saving of material by experiment in the best concern of the old style was found to be ten per cent. The facilities for making the production would be increased more than fifty per cent.—that is, the same cost or the same number of hands would produce more than twice the amount of goods. This of course decreased the cost of labor more than fifty per cent. I would say, to be more exact, I myself under the old system thought I was doing well to get the work done for four and three-quarters cents, for which I pay two now, per gross. I should say the figures I have given relate to the expense of making the buttons. As these were the prices paid to the employés that worked these machines—they were generally paid by the gross—the expense of repairs, the cost of overseeing, would probably be not more than twenty-five per cent. of the old.

Cross-int. 282. Do you mean to say it cost four and three-quarters on the twelve old machines?

Ans. I do not. I mean the old system used by others. The twelve old machines were an improvement upon the old system and covered by the old patents. The old machines were only able to make a plain button, while the new were able to make any kind of buttons. The plain buttons made by the old machines were generally the low-cost buttons, consequent upon their plainness. With the new machines we are enabled to make any kind of button with any number of pieces. These are the buttons which yield a profit generally.

Cross-int. 283. Then the twelve old machines referred to embraced the improvements covered by your old patents, and the new machines had also the devices of the old patents with the improvements of the new?

Ans. In the new machines I used all I could of the old devices, substituting others in the places of those which I discarded, making such additional improvements as was necessary to make all kinds of buttons.

Cross-int. 284. What is the difference between the twelve old machines with your improvements added and the new machines?

Ans. There were some of the devices of the old machines discarded in the construction of the new and some were retained. I discarded such as were expensive in keeping in repair, substituting others of less expense.

Cross-int. 285. Can you state by a general description what were retained of the old devices?

Ans. I retained the pistons; the compound dies as described in the patent; the device for rising and falling the pistons, although in another form; a part of the device for rotating the dies or die plate. I retained the pawls e^2 which are affixed to the upright

standard which operate, I think, the arbor *e* in the new patent. That is all I can think — that I retained.

Cross-int. 286. Can you tell which of the devices covered by the old patent was discarded in the construction of the new?

Ans. I could only tell that by going through the old patent, as I cannot remember what was covered by it. I discarded what was known as a revolving chock, which was used for alternately holding and releasing the; piston *g* also I think what in the old patents is called a notched wheel, which was used for turning and locking the die plate *a'*; also the single eccentric upon the main shaft G; also the compound cam upon the main shaft which was used for raising the piston E and also for pressing into shape the button. There are one or two other minor things which I cannot name without the old patents. That's all I think of now.

Cross-int. 287. You have said that at Medford there were one or more machines constructed having thereon some of the improvements covered by your new improvement before your removal from Medford. Was the improvement of the means of holding and locking the die plate upon the machine put upon it?

Ans. It was not.

64 Cross-int. 288. Was the partible die for compound buttons used upon either of those before removed?

Ans. It was not.

Cross-int. 289. Was it used on any of the fourteen machines that were there?

Ans. I think not.

Cross-int. 290. Was the device for stripping the sleeve of the piston die from thick-edged buttons put on before removal from Medford?

Ans. I think it was.

Cross-int. 291. Was the improvement of sliding plates for putting in filling of buttons used upon any of the machines or put on any of them?

Ans. The plates were used.

Cross-int. 292. Were the devices for the prevention of breakage of parts which operate the sliding plates put on or used on any of the machines?

Ans. They were not.

Cross-int. 293. Were the devices or means for alternately fixing and releasing the piston die sleeve put on or used?

Ans. One of them was put on as an experiment just before we left Medford, but was not determined as a successful experiment until after we got to Boston.

Cross-int. 294. Was the device for operating the centre piece of the compound die put on or used while at Medford?

Ans. In its present form, I think not. We used a compound die, but it was discarded, the manner in which it was used in Medford, for the present.

Cross-int. 295. Was the device for operating the centre piece of the compound die covered by your last patent used upon the machines at Medford or any of them?

Ans. I could not say whether the present device was substituted for the old one just before or just after we left Medford.

Cross-int. 296. It might have been before, and you will not swear it was not?

Ans. I will not swear it was not. I now speak from recollection of an occurrence that took place some seven years ago.

65 Cross-int. 297. Can you give the dates, months or years, during your partnership with McCleery and Metcalf when these thirty-four new machines were constructed and the improvements added, put upon, the old machines?

Ans. As near as I can recollect, these thirty-four new machines were constructed—perhaps I should say their construction begun—in 1876. I think some half a dozen of them were contracted for and built by two parties, one party building a part, the other party building a part, early in 1876; could not tell the date. The books of the company will show these facts. These six machines that were brought into our factory were put into operation as soon as we could put them together and such improvements as I had made at that time were put upon them. I think the next lot was twelve machines. During the building of these twelve I had time to watch the success of the improvements I had put onto the others. Then when they came in I proceeded precisely the same as in the case of the first six, making such alterations in these twelve and adding such improvements as I had made. I pursued this course until the thirty-four were built and delivered in our shop. When these thirty-four were built, the parts built outside, and were all brought in I had had time to determine by experiment the success of the improvements I had added up to that time. Being satisfied with them, as far as I had gone, that they were an improvement to that extent that it was desirable to alter the old ones, I placed the old ones in the hands of same parties that built the new ones and had them altered over to conform as near as might be with the new ones, in the condition in which they were at that time. The date I cannot give.

Cross-int. 298. Can you give any other answer to the question I put than the one you have given?

Ans. I can give the same answer I gave the other day, which was clear and precise. Some were put on when the first six were constructed; can't give the date. Some were put on after they were constructed and in our shop and in operation One was built outside and delivered to us or charged Oct. 11, 1877 They then had to be adjusted and fitted onto our machines and adjusted to operate; cannot tell how soon after; it might have been a month and might

66 have been more. Another improvement was begun Dec. 3, 1877; was put on after that, and, like the other, should say it might have taken a month or may have two. Those are the only specific dates I have.

Cross-int. 299. What firm did the work referred to under date Oct. 11, 1877?

Ans. Hough & Rumney.

Cross-int. 300. What firm under date Dec. 3, 1877?

Ans. The same.

Cross-int. 301. The exhibition of the work done would not enable you to fix these dates, would it?

Ans. Not exactly.

Cross-int. 302. When you had any work done outside who did it?

Ans. Chiefly James S. Newell & Co. and Hough & Rumney, both of Boston.

Cross-int. 303. Whatever work they did for your firm it was done from drawings or samples before them, was it not?

Ans. It was not. The work was done under my daily direction. I virtually had charge of the men employed, just the same as in our factory.

Cross-int. 304. How did they know what you wanted done?

Ans. I told them.

Cross-int. 305. When you told them, did you present to them anything in the shape of a sample or a machine or a device?

Ans. Sometimes I did and sometimes not; more times not.

Cross-int. 306. Did you have anything in; your shop which you called a sample machine?

Ans. Yes.

Cross-int. 307. One or more?

Ans. Six; after the first six was made they were samples for the others.

Cross-int. 308. Didn't you send any sample machines down to Hough & Rumney and Newell's?

Ans. No, sir; there was one at their shop. After the first six were built they delivered five and kept one.

Cross-int. 309. Did they have at their shop any sample machine to work by?

67 Ans. No; I mean before they begun; they had none to start from.

Cross-int. 310. Had they at any time?

Ans. They built six and submitted them for approval; being approved by me, one was left for a sample to build the others from.

(Adjourned.)

AUG. 4, 1882.

Direct examination resumed:

Int. 311. What did you mean by saying, in your cross-examination, that six of these old machines "came from the American Button Company?"

Ans. I would say that those six old machines were some that I built and let them have upon certain conditions. Those conditions were that if they ceased to use them they were to be returned to me. They did cease to use them and they were returned. I went there with them and run them.

Int. 312. When those twelve old machines were taken or scheduled into the Boston Button Company, the corporation, as you have stated, had any patent or patents been taken out on them of any kind?

Ans. They had not.

Int. 313. Were they the same operating machines as those subsequently patented under what we call here the old patent?

Ans. They were, with some slight improvements made upon them before the old patent of 1869 was taken out.

Int. 314. At the time McCleery came into the firm, in December, 1874, or January, 1875, what improvements, if any, covered by your last patent had been attached to any machine then owned by you and Metcalf?

Ans. There had been none, unless possibly some detached pieces were put on for the purpose of experiment, but I think none.

Int. 315. You have said that these various mechanical improvements covered by your patent were made at the expense of your firm; now whether your inventions were in any way paid for by the firm.

Ans. They were not.

68 Int. 316. Can you now state when the twelve old machines were altered over and returned to the factory?

Ans. They were altered over and returned to the factory—that is, the last of them were returned to the factory the last of August—the 27th day is the day they were charged—1877.

Int. 317. Onto which class of machines—the old or new—were your entire combined improvements first put and when?

Ans. They were put onto the old machines. The first machine that was perfected—that is, the last of the improvements—was commenced the third day of December, 1877; probably not finished until some time in January.

Cross-examination resumed:

Cross-int. 318. When you made application for a patent for your last improvements were your applications all made at one time?

Ans. They were.

Cross-int. 319. And were they all covered by one patent—the later improvements?

Ans. They were.

Cross-int. 320. Who made your application, drew your specifications, etc.?

Ans. I drew the specifications myself in the main. Mr. Warren Hill, of Boston, a solicitor, examined and corrected them and made the application.

Cross-int. 321. Whether you informed either of your partners that you were making such application for patent?

Ans. I did.

Cross-int. 322. When and which?

Ans. Couldn't tell when. I informed Mr. Metcalf.

Cross-int. 323. Did you inform Mr. McCleery?

Ans. I couldn't say that I did. My recollection is that I did. It was talked about, and he couldn't have failed to have notice.

Cross-int. 324. Did you inform Mr. Metcalf before you made the application that you were about to make it?

Ans. I should say the application was in the office at Washington when I informed him; couldn't say certain.

69 Cross-int. 325. Will you swear that you informed him of the application before the patent was granted?

Ans. I will.

Cross-int. 326. Have you any recollection of the occasion, time, place, or circumstance under which you informed him?

Ans. I have. I recollect the circumstances, where we were, and what we said. He said I should not have those patents, and one other circumstance was that he went to Washington, I have the best of reasons for believing, with the intention of preventing my having those patents.

Cross-int. 327. When was this; before the patents were issued?

Ans. It was; as he could not prevent me after they were granted, of course.

Cross-int. 328. Have you any means of fixing the date of this more particularly?

Ans. I have not; I know he went to Washington.

Cross-int. 329. Why was he not willing you should have these patents; what reason did he assign?

Ans. He gave no reason except in an angry way, unless he had his rights in the matter.

Cross-int. 330. What did he claim were his rights?

Ans. He did not say; that was the extent of the conversation.

Cross-int. 331. Did he not complain that you had applied for these patents without notice to him?

Ans. He did not, only in the conversation as detailed in the previous answer.

Cross-int. 332. What reason have you to suppose that Mr. Metcalf sought to prevent the issue of letters patent to you before they were granted?

Ans. Mr. McCleery said that I should not get those patents because Mr. Metcalf had gone to Washington, and I know he went at that time.

Cross-int. 333. Have you any other or further reason or knowledge on the subject?

Ans. Only what I have given.

Cross-int. 334. Where did this conversation with Mr. Metcalf take place, if you remember?

70 Ans. In our office at Purchase street, in the factory.

Cross-int. 335. Can you state any other conversation that took place at this time than what you have given with Mr. Metcalf upon the subject of your application for a patent?

Ans. I cannot; I can recollect nothing else.

Cross-int. 336. Did you have any other conversation with him upon the same subject before the issue of the patent?

Ans. I should say that we had considerable conversation upon the subject; that is my impression. I should say that I made several propositions to him in relation to the patents, when they should be issued.

Cross-int. 337. What were those propositions?

Ans. I recollect that I proposed to reorganize the company, putting in the patents as twenty-five per cent. of the capital stock—that is,

both the old and new patents was to represent twenty-five per cent. of the capital. I recollect that that was before the patents were issued. I am not certain that it was not after they had been allowed.

Cross-int. 338. Any other proposition did you make before the issue?

Ans. I don't know as there was, unless a proposition to buy or sell.

Cross-int. 339. What did Mr. Metcalf say to these propositions?

Ans. He wouldn't do anything of the kind.

Cross-int. 340. What reason did he assign?

Ans. The only one he assigned was that the patents were as much his as mine, because we were partners.

Cross-int. 341. He claimed, therefore, that it was wrong towards him for you to obtain these patents without his knowledge or his having any interest in them?

Ans. He claimed that they were his. He didn't say that it was wrong or anything of the kind. He treated me as if I had no rights whatever. He always met me in an angry manner, and we were never able to discuss the matter with much show of reason.

Cross-int. 342. Did he not claim that you were employed and paid to improve the machinery, and that the firm should have the benefit of your improvements?

71 Ans. He never did, for he knew better. He knew that I was an employer and not an employee.

Cross-int. 343. You have stated what he claimed. Will you now state what reason he assigned for that claim?

Ans. I have answered that by saying we were partners. That's the only claim he ever made.

Cross-int. 344. Did you never have any other solicitor or lawyer or person to assist you in obtaining your patents than Warren S. Hill?

Ans. I did not.

WILLIAM W. WADE.

Attest: WINSLOW WARREN,
Special Examiner.

(Copy.)

EXHIBIT A, W. W.

Know all men by these presents that whereas I, William W. Wade, of Medford, in the county of Middlesex and State of Massachusetts, did obtain letters patent of the United States of America for improvements in buttons, which letters patent is dated March 23, 1869, and numbered 88099; also letters patent for machines for making covered buttons, bearing date April 27, A. D. 1869, and numbered 89450:

Now, therefore, in consideration of one dollar to me paid by Henry B. Metcalf, of Pawtucket, in the State of Rhode Island, receipt of which is hereby acknowledged, I do hereby sell and convey unto the said Metcalf and his legal representatives one-half of all my title in and right under the before-mentioned letters patent; to have and

to hold, with all right pertaining thereto, as fully as I, the said Wade, could do if this assignment had not been made.

In testimony whereof I have hereunto set my hand and seal this ninth day of January, A. D. 1875.

——— ———. [L. S.]

In presence of—

——— ———.

72 (Copy.)

EXHIBIT B, W. W.

The undersigned, William W. Wade and Henry B. Metcalf, doing business under the name of the Boston Button Company, hereby agree that their business relations shall be governed by the following regulations, and that so far as applicable the same regulations shall be obligatory upon any other parties who may become associated with them:

Capital stock. The capital stock shall be twenty thousand dollars, seven-fifteenths of which shall be contributed by said Wade and eight-fifteenths by said Metcalf. Either party, with consent of the other, may sell stock, but the purchaser must give written assent to the conditions of this contract.

Division of profits. Profits, after paying expenses, shall be credited to each partner *pro rata* according to stock, but shall not be drawn out, except as herein provided.

Drawing money. No money shall be drawn other than for salaries, except by mutual consent, and then only *pro rata* according to capital stock.

Dissolution. In the event that either partner shall desire a dissolution of the firm he may give written notice of such wish, accompanied by an offer of price at which he will buy or sell. Whereupon, at some time during six months thereafter, the other partner or partners shall either buy or sell on basis of price named, it being understood that the profits or losses during the interim shall be for account of both or all the partners.

Decease of a partner. In the event of the decease of a partner the survivor or survivors shall, at any time within six months thereafter, have the right to take the entire interest at a price to be fixed by a disinterested reference.

73 Patents. The Boston Button Company shall have free use of the patents numbered 88099 and 89450, but it is hereby distinctly declared and understood that we herein assume no obligation to warrant or defend the same.

Signed in duplicate this ninth day of January, A. D. 1875.

HENRY B. METCALF. [L. S.]
W. W. WADE. [L. S.]

(Copy.)

EXHIBIT C, W. W.

BOSTON, *November*, 1874.

In consideration of four thousand three hundred and thirty-three $\frac{33}{100}$ dollars to me paid by Wm. McCleery, receipt of which is hereby acknowledged, I hereby sell, assign, and convey to said McCleery thirteen-sixtieths ($\frac{13}{60}$) of the capital stock of the Boston Button Company; to have and to hold, with all the rights pertaining thereto, as fully as I, the said Wade, could hold and exercise if this conveyance had not been made; and I further agree that I will not assent to any disposition of patents Nos. 88099 and 89450 without approval of said McCleery, and if I shall realize any renewals therefrom I do hereby obligate myself to share the same with him in proportion to our respective interests in the Boston Button Company.

W. W. WADE.

(Copy.)

EXHIBIT D, W. W.

BOSTON, *Nov.* 1, 1874.

In consideration of six hundred and eighty-six $\frac{67}{100}$ dollars to me paid by Wm. McCleery, receipt of which is hereby acknowledged, I hereby sell, assign, and convey one-thirtieth of the capital stock of the Boston Button Company; to have and to hold, with all the rights pertaining thereto, as fully as I could hold and exercise the same if this conveyance had not been made; and I further
74 agree that I will not assent to any disposition of patents Nos. 88099 and 89440 without approval of said McCleery, and if I shall realize any renewals therefrom I hereby obligate myself to share the same with him in proportion to our respective interests in the Boston Button Company.

(Signed) HENRY B. METCALF.

(Copy.)

EXHIBIT COMPLAINANT'S NOTICE, W. W.

To Henry B. Metcalf and William McCleery:

You are hereby notified that I deny your right to use the forty-eight machines for making covered buttons now in your possession and which were formerly used by the Boston Button Company while I was a member thereof with you, and that any use of said machines or any one or more of them is an infringement of the patent granted to me and now wholly owned by me, dated June 1, 1880, and numbered 228,233, for "improvement in machines for making buttons," and that any running or use of said machines or

any of them by you or either of you, your agents or servants, is in violation of law and my rights, and will be prosecuted by me.

Boston, Nov. 11, 1880.

(Signed) WILLIAM W. WADE.

I served the duplicate of this notice on this Nov. 12, 1880, by handing the same to William McCleery, one of the persons addressed.

(Signed) CHARLES W. WADE.

(Copy.)

EXHIBIT DISSOLUTION CONTRACT, W. W.

Agreement made this thirtieth day of October, 1880, by and between William W. Wade, of Medford, Mass., and Henry B. Metcalf, of Pawtucket, R. I., and William McCleery, of Boston, Mass., witnesseth:

First. It is agreed that the firm composed of said Metcalf, McCleery, and Wade and doing business under the style of the Boston Button Company shall be this day dissolved.

Second. The said William W. Wade, in consideration of the payment to him of the sum of twelve thousand dollars by the
75 said Metcalf and McCleery, receipt of which is hereby acknowledged, hereby sells and conveys to the said Metcalf and McCleery all his interest in the property and assets of every name and nature of said firm of the Boston Button Company, together with the good will of the same, with authority to use his name if necessary in the premises, saving him harmless from all cost in the same.

And whereas certain machines, forty-eight in number, with a certain improvement thereon, manufactured by said firm have been and are now in use by said firm, and the same Metcalf and McCleery claim the right as members of said firm, by virtue of the manufacture and use by said firm of said machines with said improvements, to continue such use, and the said Wade reserves the right to deny such claim:

Therefore nothing in this sale and conveyance shall operate as an assent on the part of said Wade to the right to use said improvements upon said machines or as granting any rights for such use other than said Metcalf and McCleery now have, whatever they may be, and nothing in this reservation shall be construed to lessen or impair any rights which the said Metcalf and McCleery may have to such use.

It being further understood that each party shall have the right to manufacture and use machines under patents for improvement in buttons, one dated March 23, 1869, and numbered 88099, and one dated April 27, 1869, and numbered 89450, but neither party shall vend to others the right to use or manufacture machines under said patents without mutual consent, except as the same may be necessary in the reorganization or liquidation of their own business.

The said Metcalf and McCleery hereby assume the payment of

the debts of said Boston Button Company and agree to indemnify and save harmless the said Wade therefrom.

Witness the hands and seals of said parties the date above written.

(Signed) HENRY B. METCALF. [SEAL.]
(Signed) WILLIAM W. WADE. [SEAL.]
(Signed) W. McCLEERY. [SEAL.]

In presence of—
(Signed) B. E. PERRY
To W. W. W.
(Signed) H. C. HUTCHINS
To H. B. M. and W. McC.

76 *Deposition of George A. Wade.*

BOSTON, *May* 6, 1882.

Direct examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Int. 1. What is your name, age, residence, and business or occupation?

Ans. George A. Wade; thirty-five; Winchester, Mass.; mechanic.

Int. 2. How long have you worked on machinery or as a machinist, and where and what did you do in the years 1875 to 1879, inclusive—that is, what was your department of work and the general character of your employment, and whether in or out of the factory of the company?

Ans. For the last seventeen or eighteen years I worked for the Boston Button Company as foreman for those years at Medford and Boston, making tools, dies, etc., and assisting to build machinery for the different branches of the business in the factory of the company.

Int. 3. Do you remember the "new machines," as they have been here called, that were put into the factory or work-rooms of the Boston Button Company; and, if so, at what time were they so put in—that is, what year or years, and whether all at a time or at different times?

Ans. I do. I do not remember exactly the time they were put into the factory. The machines were put into the factory at Medford, two of them. I cannot tell the years the others were put in. They were put in after we came to Boston, at different times.

Int. 4. State whether these new machines were built like the old ones; and, if they differed, in what respect did they differ?

Ans. The two first ones put in at Medford did not differ materially from the others only in size. The others put in in Boston had different attachments put onto them after they came into the factory in Boston. Some of the attachments were put on before they came in and others after. They were larger machines than the old ones.

Int. 5. If the cams on the new machines differed at all from the cams on the old machines state in what respect or how.

77 Ans. They were made so that the rise and fall of the piston was an easier motion, thereby giving a chance to run the machines faster; also the shape was in that form which enabled the cams to rum with less wear.

Int. 6. Do you remember the new locking arrangements—that is, the placing of the detent above the bed and its co-operation with the revolving plate that holds the dies? If so, will you state when that arrangement was put onto the machines, and, if you can remember, who besides yourself and father worked on the improvement or any of its parts, if any one?

Ans. I do. That was put on after we came into Boston; could not state the time now. I don't remember of but one man besides that had anything at all to do with it in any shape or manner, and he worked under our direction. After the first one was put on, which I think was put on by Mr. W. W. Wade, Mr. E. N. Lord worked upon it in the factory, putting on others.

Int. 7. Whether this arrangement—this locking arrangement—was completed all at one time or in successive steps or stages.

Ans. It was not completed all at one time. I couldn't give dates. There was considerable time elapsed between its first mention and its completion.

Int. 8. If you understand what is meant by the "swinging lever" will you state, if able, when that was first applied or put onto the machines?

Ans. That was not completed all at once. It was put on at various times. It was completed—I couldn't be positive—I think some time in 1877.

Int. 9. State what this lever was intended to do or what office does it perform.

Ans. The lever carried the sliding pieces which held the parts of the button under the piston in readinses to operate with the punch.

Int. 10. State whether this operation or arrangement was beneficial or otherwise, and in what respect.

Ans. It was beneficial. By combining the yielding block with the swinging lever if anything happened to the sliding piece in
78 the plate the block yielded and allowed the punch to pass over it without injuring the swinging lever.

Int. 11. Was this ring arrangement a perfectly operating arrangement, or had it defects; and, if so, what were they?

Ans. It was not a perfect operating device; it was put on by the operative by hand, and at the speed at which the machine run it was often the case that it was not put on in its proper place, in consequence of which it would come between the punch and the dies in a manner to get bruised and battered, making it unfit for use in a short time, and the liability of the machine being broken by the sudden stoppage when it came between the punch and die.

Int. 12. How or in what way was the adoption of the sliding plate an improvement over this ring arrangement?

Ans. It done away with handling the rings by the operative, the sliding pieces which answered the purpose of rings being automatic.

Int. 13. How was this lever attached to the machine—that is, whether rigidly or in a yielding way?

Ans. First rigidly, lastly in a yielding manner.

Int. 14. When was what is called here a yielding block and frame and spring, which form this combination, first attached to a machine or the machines, and where were the machines when this was applied in its perfect state?

Ans. I answered that once before, I believe. I think it was in the latter part of 1877 or first of 1878. It was somewhere about that time; I can't state positive.

Int. 15. Do you recall or understand what is claimed and described as a jointed or flexible lever; and, if so, will you state when it was perfected and applied to the machines in working order, and will you state where it was manufactured, or what part, if any, was done outside the button company's factory?

Ans. I do; it was perfected and applied—I cannot tell the date, do not recall it. I think it was in 1877 or 1878; I am unable to fix the month; it was made outside of the factory and brought into the place and adjusted; it was adjusted by myself and W. W. Wade.

Int. 16. State generally what was the effect of these various additions or changes, after they had been applied, upon the production, stability, or character and work of the machines.

79 Ans. Before these improvements were applied it was the labor of one man constantly all the time to keep the machines in repair and the different parts to operate exactly to produce good work. By the aid of the different improvements the machine was not liable to get out of order; it took less time to keep it in repair; it worked a good deal easier, and the result was more and better work, and by the aid of the improvements different kinds of work could be made which it was impossible to make successfully before these improvements were put on.

Int. 17. State whether these effects you have described were successive as one after the other of the changes were made—that is, whether each one was an advantage and increased quality or production or otherwise.

Ans. They were successive; each one was an advantage and increased quality and production.

Int. 18. Will you state, if you can tell, what the expense of these various alterations or improvements was—I mean so much of them as were done outside of the manufactory of the company—and state what was obtained or done outside.

Ans. I could not state what the expense was; we always had various kinds of work done outside, more or less, not having a general machine shop in the place. We used to have some little work done at Hough & Rumney's; some at Newell's, on Lincoln street; all of which Mr. Wade used to attend to—Mr. W. W. Wade.

Int. 19. Who had charge of the machinery during all the time these improvements were making?

Ans. I had charge of it; I remained in charge until I left, in August, 1880.

(Adjourned.)

AUG. 4, 1882.

Cross-examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Cross-int. 20. You are the son of the complainant in this case, are you not?

Ans. I am.

Cross-int. 21. Where do you now live?

80 Ans. Yarmouth, Me.

Cross-int. 22. Are you employed there; and, if so, how?

Ans. I am; by C. H. Weston, manufacturer of machinery for leather belting.

Cross-int. 23. How long have you been there so employed?

Ans. About ten weeks.

Cross-int. 24. You were with your father on Chardon street after he dissolved with Mr. Metcalf and Mr. McCleery, were you not?

Ans. I was.

Cross-int. 25. When did you leave your father's employment?

Ans. I couldn't say positively; some three or four months ago.

Cross-int. 26. Were you a partner with him or an employé upon wages?

Ans. We never had any definite settlement; I never was a partner.

Cross-int. 27. What was the business carried on there by your father?

Ans. Manufacturer of buttons.

Cross-int. 28. Did he use the same kind of machines, substantially, that were used by the Boston Button Company?

Ans. He did.

Cross-int. 29. Where did he get them?

Ans. They were manufactured by him at different places.

Cross-int. 30. How many did he have while you were with him?

Ans. Six.

Cross-int. 31. Were these machines manufactured or made from pattern?

Ans. Partly.

Cross-int. 32. And were those the patterns that had been made or used or owned by the Boston Button Company?

Ans. Partly.

Cross-int. 33. How were you employed while in your father's service on Chardon street?

Ans. I had charge of the manufacturing.

Cross-int. 34. When did you first go into the employment of the Boston Button Company?

81 Ans. I couldn't say; since they have been in existence.

Cross-int. 35. Were you in the employ of the Boston Button Company when they manufactured at Medford?

Ans. I was.

Cross-int. 36. And you came to Boston when they did and continued in their employ?

Ans. I did.

Cross-int. 37. When the concern left Medford and came to Boston how many old machines had they and how many new in use?

Ans. Twelve old and two called new ones.

Cross-int. 38. Wherein did the two new ones differ from the old?

Ans. Not a great deal; only in size, as near as I can remember.

Cross-int. 39. Can you state whether any of the improvements covered by your father's last patents were on those two new or twelve old machines before he left Medford?

Ans. Not one of them, I think, fully completed.

Cross-int. 40. Were not these two new machines completed with some or all of these improvements and in actual use in the making of buttons before leaving Medford?

Ans. They were in process of improvement, but not fully completed.

Cross-int. 41. Do you mean not completed so as to be used in the manufacture of buttons?

Ans. One of them was not; never had been used; couldn't state positively about the other, as I didn't have charge of it.

Cross-int. 42. Do you remember when the improvements covered by the last patent were placed upon the twelve old machines that were brought into Boston?

Ans. I could not tell the time.

Cross-int. 43. Did you leave the service of the Boston Button Company before the dissolution in October, 1880?

Ans. I don't know; I was there at the time Mr. Wade published the dissolution.

Cross-int. 44. Can't you tell when you left?

Ans. I could not tell the date; I think it was in August, before the agreement of dissolution.

82 Cross-int. 45. When you left how many machines were there used by the firm?

Ans. Forty-eight, I think.

Cross-int. 46. And did these forty-eight machines all have upon them the improvements covered by the last patent?

Ans. They did not.

Cross-int. 47. Will you state how many of these machines had on them the improvement under the last patent?

Ans. I cannot, positively.

Cross-int. 48. Were these improvements put upon the twelve old machines brought into Boston from Medford?

Ans. They were.

Cross-int. 49. How many new machines were made after you came into Boston before the dissolution?

Ans. Thirty-four.

Cross-int. 50. Who made these?

Ans. Newell, on Lincoln street—J. S., I think—and Hough & Rumney, Chardon street.

Cross-int. 51. Did Newell make them all, or parts of all?

Ans. He made parts of them all.

Cross-int. 52. And Hough & Rumney made parts, each making different parts?

Ans. Yes, sir.

Cross-int. 53. Did Newell or Hough & Rumney, either or both, place upon these machines the improvements covered by your father's patent?

Ans. Some of the improvements.

Cross-int. 54. Who paid the bills for the work?

Ans. I don't know; I did not.

Cross-int. 55. Don't you know that it was paid by the company?

Ans. I supposed it was; don't know. I was not in a condition to know about the money affairs of the company.

Cross-int. 56. Did you have anything to do with getting them to make them?

Ans. I did not.

Cross-int. 57. Did you have anything to do with the manufacture of these new machines, or with putting these improvements upon the old ones?

83

Ans. I adjusted the old and new ones after they were put on.

Cross-int. 58. What do you mean by adjusting?

Ans. Putting them into condition to run.

Cross-int. 59. After they were put on—put on by whom?

Ans. After the machines were built by Newell and Hough & Rumney.

Cross-int. 60. Please explain what you mean by adjusting more fully?

Ans. Putting the parts together that the different parties made. There were a number of holes to be drilled, dies put on, and the machines so fixed that they would make buttons.

Cross-int. 61. What was the condition in which a machine came from the hands of Newell or Hough & Rumney?

Ans. They came in parts and had to be adjusted so as to make buttons.

Cross-int. 62. What, if any, part of the machinery did you make and add after the machines came from the hands of Newell or Hough & Rumney?

Ans. Springs were to be put on and numberless other little things that I can't call to mind now.

Cross-int. 63. This adjusting was done at the factory of the Boston Button Company, was it not?

Ans. It was.

Cross-int. 64. And at the expense of the company?

Ans. It was.

Cross-int. 65. Whether or not these forty-eight machines that were there when you left had all been used at some time for the manufacture of buttons by the concern?

Ans. I think they had.

Cross-int. 66. Why did you say you think they had; don't you know they had?

Ans. No; because some of them might have been used in the manufacture of parts of buttons.

Cross-int. 67. You know that they were all employed in some way in the manufacture of buttons before you left?

84 Ans. Yes; buttons or parts of buttons.

Cross-int. 68. Will you now state what duty you discharged in the service of the Boston Button Company after they came into Boston?

Ans. I had charge of manufacturing.

Cross-int. 69. What service did that involve?

Ans. To see that machines were kept in order, ready for manufacturing, that orders were filled, and so on.

Cross-int. 70. Did you hire or pay or discharge the help?

Ans. I sometimes hired and sometimes discharged. I did not pay them. I generally hired and discharged; it was in my line.

Cross-int. 71. Were your duties the same all the time you were in the service of the company in Boston?

Ans. They were in different departments. There is a department of supplies, etc. I had charge of the manufacturing in them all, at different times.

Cross-int. 72. What wages or salary did you receive from the Boston Button Company?

Ans. Different sums at different times—weekly pay.

Cross-int. 73. Whether these forty-eight machines at the time you left were complete and ready for the use that was required of them.

Ans. They were.

Cross-int. 74. Can you tell what kind of buttons were made at Medford before you left?

Ans. They had commenced to experiment on what is known as fancy buttons.

Cross-int. 75. Were not fancy buttons made upon the machines at Medford before moving to Boston, or sold in the market?

Ans. They were, to some extent.

Cross-int. 76. Were not these fancy buttons made at Medford by means of these improvements of your father's in his patent or some of them?

Ans. As patented, no.

Cross-int. 77. On which of these machines—the twelve old or the two new—were these fancy buttons?

Ans. I don't remember.

85 Cross-int. 78. Whether you left the service of the Boston Button Company before you father left?

Ans. I did not.

Cross-int. 79. Did you leave when he did or after?

Ans. After.

Cross-int. 80. What were the duties performed by your father as a partner in the Boston Button Company with Metcalf and Mr. Cleery?

Ans. He was superintendent of the factory.

Cross-int. 81. Do you mean by that the machinery and the manufacturing department?

Ans. Yes.

Cross-int. 82. Did he ever do any manual labor?

Ans. I have seen him at work occasionally.

Cross-int. 83. What did you see him do?
Ans. I couldn't say now.
Cross-int. 84. Wherein did his duties differ from yours?
Ans. I might say I was a deputy of his.

GEO. A. WADE.

Attest: WINSLOW WARREN,
Special Examiner.

86 *Evidence for Defendants, Taken Pursuant to the Sixty-Seventh Rule of the Supreme Court of the United States, in Equity, as Amended, Before me, Winslow Warren, Special Examiner.*

Present: Baxter E. Perry, Esq., of counsel for complainant; Henry C. Hutchins, Esq., of counsel for defendants.

Deposition of William McCleery.

BOSTON, *Sept.* 28, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Will you please state your name, age, residence, and occupation?
Ans. William McCleery; thirty-two; Boston, Mass.; button business with H. B. Metcalf, under the style of Boston Button Company.
Int. 2. Whether you were at any time a partner with Mr. Wade, the complainant in this case, and Mr. Metcalf; and, if so, when did you become such partner and when cease to be a partner?
Ans. I became a partner with Mr. Metcalf and Mr. Wade Jan. 1, 1875, and ceased to be a partner with Mr. Wade October, 1880.
Int. 3. Whether before becoming a partner with them you were a clerk for them or either of them.
Ans. I was a clerk for both when they were doing business as partners as the Boston Button Company.
Int. 4. Where was the place of business of the firm or the factory when you became a member of the firm, Jan. 1, 1875?
Ans. At Medford, Mass.
Int. 5. When did your firm leave Medford and move to Boston?
Ans. The last week in February, 1876.
Int. 6. When you became a member of the firm what interest therein did you take or have?
Ans. One-quarter.
Int. 7. And Mr. Wade?
87 Ans. One-quarter.
Int. 8. And Mr. Metcalf?
Ans. One-half.
Int. 9. Was that interest changed at any time during the existence of the partnership, or was it always the same?
Ans. It was not changed. It remained the same to the dissolution.
Int. 10. Was there any other partner during that period?
Ans. No.

Int. 11. In addition to these proportions of profits was anything paid or allowed to partners; if so, what?

Ans. Yes; each partner was paid a specific salary for duties to be rendered. Mr. Wade was to receive fifteen hundred dollars per annum, Mr. Metcalf three hundred, and I was to receive fifteen hundred.

Int. 12. Were those salaries paid throughout the period of partnership?

Ans. They were.

Int. 13. When you became a member of the firm, in January, 1875, at Medford how many button-covering machines did the firm own?

Ans. They owned twelve styled "old machines" and two styled "new large machines."

Int. 14. When you left Medford, February, 1876, and moved to Boston you brought with you fourteen of these machines, did you not?

Ans. Yes.

Int. 15. What was the difference between the twelve old and the two new substantially at that time, when you came in?

Ans. The two new were larger and had on later improvements.

Int. 16. Had these two larger machines, one or both, the improvements covered by the later patents of Mr. Wade?

Ans. One had all the later improvements with one exception, and that exception covered by part of claim 5 and known as the device for preventing breakage of the parts which operate sliding plates. The other had part, but may not have been making buttons in Medford.

Int. 17. Will you state when the improvements or ap-
88 pliances under the later patent of Mr. Wade were put, if at all, upon the twelve old machines?

Ans. They were put upon the twelve old machines prior to May 10, 1877.

Int. 18. What number of machines in all were there of the firm at the time of its dissolution, in October, 1880?

Ans. Forty-eight covering machines.

Int. 19. When and where and by whom were the balance of these machines made?

Ans. Thirty-four machines were built in the machine-shop of James S. Newell & Co., Boston. The first order was given May, 1876. They were all built and delivered in our factory prior to May, 1877. The first delivery made was three, Sept. 11, 1876; six, Sept. 25, 1876, and so deliveries followed right along.

Int. 20. Who gave the orders for these machines?

Ans. I did.

Int. 21. Who paid for the work?

Ans. The Boston Button Company, in whose name they were ordered.

Int. 22. From what were these machines made—drawings, patterns, or how—by James S. Newell & Co.?

Ans. They were made from drawings, patterns, and a sample

machine, which was one of the two new large machines that we had in daily operation at our factory. The drawings were made by Mr. Thomas S. Davis under the supervision of Mr. Wade.

Int. 23. How long before the dissolution, in October, 1880, were these machines in use and operation by the firm?

Ans. They were put into operation as soon as possible after the delivery of each lot in our factory. We could not get the machines fast enough, and got James S. Newell & Co. to run nights on our work, and also employed additional help in our factory to put them into operation.

Int. 24. Can you state a period of time before the dissolution, in October, 1880, when all these machines had been used and operated?

Ans. They were all used or ready for use—the thirty-four machines—prior to the sending out of the twelve old machines to be altered and improved, which was May, 1877.

89 Int. 25. In what condition did these thirty-four new machines come from the hands of J. S. Newell & Co.?

Ans. They came all ready to have the appliances and tools for making buttons put on them.

Int. 26. You mean that the machines were to be set up and oiled, or what?

Ans. Yes; they were to be set up and oiled and put in use.

Int. 27. Was any more machinery to be made in order to put them into operation?

Ans. There were other parts to be put on above the bed plate, a filling-in plate, dies, posts, and springs.

Int. 28. Where was that done?

Ans. Some of these parts were made by J. Leavitt & Co., some by ourselves, but all put on and adjusted in the factory.

Int. 29. After a machine was brought from the hands of J. S. Newell & Co. what time was necessary to prepare it and fit it for use?

Ans. It would depend on the number of men that would work on it; but from the condition our orders were in it did not take long to put each machine in operation, as we were waiting for the work. Some machines took considerable time in the adjustment and others not. I could not state more definitely.

Int. 30. When you became a member of the firm you became interested and had conveyed to you by the firm some interest in what you call the old patent, had you not?

(Objected to.)

Ans. Yes.

Int. 31. These twelve old machines that were in use in Medford were made under that old patent of Mr. Wade, were they not?

Ans. Yes; and had some improvements of the new patent.

Int. 32. Please state whether all these forty-eight machines which the firm owned at the time of the dissolution were covered in part by the old patent and the new devices embraced by the later patent.

Ans. They were.

Int. 33. You have said that Mr. Wade was paid a salary, in addition to his profits as a member of the firm, of fifteen hundred dollars per year. For what was that salary paid?

90

Ans. For the improvement and development of the machinery of the firm.

Int. 34. Whether you or Mr. Metcalf knew of the application of Mr. Wade for his later patent.

Ans. I did not know of it at the time of the application, and Mr. Metcalf never said to me that he knew of it.

Int. 35. When did you learn of it?

Ans. A short time before the letters patent were issued. They were issued June 1, 1880.

Int. 36. What took place when you heard of it?

Ans. Mr. Wade then claimed them, the letters patent, as his personal property, and Mr. Metcalf and I denied his right to such claim.

Int. 37. Were the grounds stated by you to Mr. Wade of your claim?

Ans. They were; by either Mr. Metcalf in my presence or by me.

Int. 38. What were those grounds stated by you?

Ans. That the improvements were made at the firm's expense and risk, applied to the machines in their factory and operated by them, and that Mr. Wade was paid a salary for this department of the work.

Int. 39. Were these forty-eight machines substantially alike—that is, did they make the same work?

Ans. They were substantially alike, but differing in size; and the large machines adapted for larger buttons.

Int. 40. Were all these machines complete in themselves for making buttons or how otherwise, at the time of the dissolution?

Ans. They were all in operation, and each machine was complete in itself, so far as making some kind of button was concerned.

Int. 41. Something has been said about transferring some of these appliances from one machine to another; will you explain with regard to that, and why it was done?

Ans. Some of the improvements are stationary and on all the forty-eight machines; the other improvements are not stationary, and can be changed from one machine to another for the purpose of varying the style of button.

91

Int. 42. Since the dissolution of the firm the present firm have been using these forty-eight machines as they were purchased by you of the old firm?

Ans. Yes.

Int. 43. And no other?

Ans. No others.

Int. 44. What was your salary paid to you for—for what service—and for what was Mr. Metcalf paid a salary?

Ans. Mr. Metcalf's salary was paid for what assistance he lent in financial matters. My salary was paid for the general superintendence and management of the business.

Int. 45. You have stated in former answers that one of the de-

vices or improvements was wanting on one of the new large machines at Medford. When was that added to that machine after your removal to Boston, if at all?

Ans. That was added after our removal to Boston, the latter part of 1876.

Int. 46. What kind of buttons were made at Medford?

Ans. We made light-shaped buttons, called wire-edged; thick-edged buttons, called crown, half ball, full watch, inverted dome or high back, oval, cone-shaped or military, silk backs. These were all one-piece buttons. We made also two-piece buttons—namely, rim-edged, rim oval, rim convex, and jet centre; all of which were made and sold before we came to Boston.

Int. 47. And were any or all of these embraced or covered by or dependent upon the new devices of the later patent?

Ans. They were, some of them—the crown, military, full watch, rim edge, half ball, and canvas back.

Int. 48. When you came into the concern in January, 1875, was there an inventory taken of the property of the firm?

Ans. No; not then; it had been taken Nov. 7, 1874, and it was on the basis of that stock account that I took my interest.

Int. 49. Whether there was in the inventory any of these patterns or devices or machines included; and, if so, state what ones.

92 Ans. The patterns for the two new large covering machines were in the inventory of 1873—January, 1873—and then also appeared in the inventory of Nov. 7, 1874. There also was in this last inventory two new large covering machines for two hundred and fifty dollars. In the inventory of January, 1873, there were three automatic paper feeding plates, at twenty-five dollars each. These also were in the inventory of November, 1874. In account stock January, 1873, were twelve lifter-fingers for covering machines, at fifteen dollars each. These were also in the inventory Nov. 7, 1874. The automatic paper-feeding plate is the same as stated in the new patent, claim four. The lifter-fingers for covering machine are the same as mentioned in claim three of the new patent—viz., the means for stripping sleeve of piston die from thick-edged buttons.

Int. 50. I understand you to have said that the thirty-four new machines were built at the expense of the firm and by the firm, and that the twelve old machines had the new appliances attached to them by the firm and at the expense of the firm, and that the other two new large machines were bought by and at the expense of the firm at its formation; whether or not the profits derived from the use of those machines and from the buttons made from them were divided in the proportions you have given among the members of the firm?

Ans. They were divided in proportion to the interest of each party.

Int. 51. Whether at any time while these machines were being altered and others built anything was said to you by Mr. Wade that he should claim for himself the benefit of these improvements so made upon these machines?

Ans. He never made any such claim.

Int. 52. Whether any claim was made at the time when you became a member of the firm that he should make claim for himself for any improvements in the machines already made or to be made?

Ans. I never knew that he had made such claim.

Int. 53. You say the firm was dissolved in October, 1880, by mutual agreement; whether an attempt at dissolution or notice of dissolution was made earlier than that; if so, by whom?

Ans. A notice of dissolution appeared in the Boston Daily Advertiser July 21, 1880, and was signed W. W. Wade.

93 Int. 54. Whether this was followed by a bill in equity applying for a dissolution and a receiver by Mr. Wade?

Ans. It was.

Int. 55. What was the effect of this proceeding upon the business of the concern?

Ans. It brought in numerous inquiries in relation to our business standing, as rumors were through Boston and New York that we were running the business and had no right to do so.

Int. 56. Whether or not your credit was drawn in question?

Ans. There is no doubt but that it was.

Int. 57. After the dissolution of the old concern with Mr. Wade you have continued the business of making buttons ever since at the old place?

Ans. We have.

Int. 58. How do the prices obtained for buttons made since the dissolution compare with former prices?

Ans. We have not been able to maintain our former prices for buttons of the same kind as are made and sold by Mr. Wade.

Int. 59. Why not?

Ans. Because he has broken the prices, and if we want to sell we must sell at his prices or lose the trade.

Int. 60. Whether you have ever lowered the price of your buttons for the purpose of injuring him and his business and his family?

Ans. We have never lowered the prices of buttons same as Mr. Wade makes in competition with us for that purpose.

Int. 61. Have you ever lowered the price of buttons made by him as well as you except that they had been first lowered by him?

Ans. We never have.

Int. 62. Have you ever been the first to break price of buttons such as he makes or sells?

Ans. We never nave.

Cross-examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Cross-int. 63. Prior to your going into the firm with Metcalf & Wade, Jan. 1, 1875, how long had you been employed by them as a clerk?

94 Ans. Since the withdrawal of the firm of Henry B. Metcalf & Co. from Boston, about four years.

Cross-int. 64. Was there any other partner with them during your employment as clerk, if you know?

Ans. Yes; Daniel G. Littlefield.

Cross-int. 65. If you know, please state when he went out of the firm.

Ans. I cannot tell exactly; it must have been at or before Nov. 7, 1874.

Cross-int. 66. Did any other partner then come in, or about then?

Ans. No.

Cross-int. 67. Was there any other partner in the firm with you except Mr. Metcalf and Mr. Wade?

Ans. No.

Cross-int. 68. Prior to your entering the firm what were your precise duties as clerk?

Ans. I bought stock and supplies, sold buttons, kept the books, and collected the accounts.

Cross-int. 69. Where were you stationed during this time?

Ans. First in Franklin street, in the store of H. B. Metcalf & Co.; next in Milk street, in the store of C. H. Dunham & Co.; then at 27 Cornhill; all in Boston.

Cross-int. 70. How often during this period were you at Medford, at the factory?

Ans. Once a day, at least, during working days; sometimes oftener.

Cross-int. 71. How much time did you spend there?

Ans. Sometimes an hour, sometimes half a day.

Cross-int. 72. What were your duties there or what did you do?

Ans. I carried out orders, carried out bundles of stock from which to have special orders made; I took memorandums of stock required, took out money from which to pay help, examined to find what buttons were being made, and gave instructions regarding them.

Cross-int. 73. Prior to this clerkship what had been your business or occupation.

95 Ans. I was clerk for Henry B. Metcalf & Co. about five or six years. I was both salesman and book-keeper there.

Cross-int. 74. What mechanical business have you ever learned or been engaged in up to the time of your entering this firm?

Ans. I had never learned any mechanical business or been engaged in any.

Cross-int. 75. What mechanical knowledge have you, practical or theoretical?

Ans. That which I have learned from being engaged in the button business.

Cross-int. 76. When you became a partner, as you say, in January, 1875, what kind of buttons were being made on the twelve old and the two new large machines, as we have styled them, that differed from what had been made during the time of your clerkship before, if any?

Ans. There were many kinds that differed from those made when I first became a clerk for the firm.

Cross-int. 77. In what respects, of character or quality or styles?

Ans. We had gone into different styles; they differed in shape and size and for the trade that we made them for.

Cross-int. 78. Was there any kind made on these machines that could not have been made on earlier machines used by them?

Ans. There were; about the time I became a partner.

Cross-int. 79. What were these kinds and how and in what respect did those machines aid or secure the making of them?

Ans. Thick edge, dome-shaped, inverted dome-shaped, rim-edged, and canvas back; the canvas back were made with the improved automatic sliding plates; the inverted dome and thick-edged buttons brought into requisition a lifting finger or sleeve-stripping device; the rim-edged buttons were made, some of them, with the improved partible die.

Cross-int. 80. These machines, then, as they were in January, 1875, were, in your belief and opinion, an improvement over earlier machinery or appliances known to you?

Ans. They were.

Cross-int. 81. Can you state whether the die used at this
96 time, in 1875, was the same as has since been employed or used on those machines?

Ans. I can state that the die which was used some time during 1875 and prior to January, 1876, is the same as that now used.

Cross-int. 82. Can you tell any more definitely when the die as now used was first applied or used on the machine?

Ans. I cannot give the day or month, but it was prior to 1876.

Cross-int. 83. In what respect did the two large machines you speak of as being at Medford before you moved differ from the other twelve old machines before the new or disputed devices were added?

Ans. They were larger. I could not say that they differed in any other respect when they came from the machine shop and before these new devices were added.

Cross-int. 84. You say in your direct examination that all the improvements covered by the new patent had been put onto one of these large new machines, with one exception which you mention; now, was the locking arrangement on that machine before you moved in, as you said?

Ans. It was.

Cross-int. 85. Did the locking arrangement then include the jointed or flexible lever?

Ans. It did, but there was a slight change made in it while the new machines were being made at J. S. Newell & Co.'s.

Cross-int. 86. Did it include the detent for holding or locking the plate in the same place and of the same kind as now used?

Ans. I think that was wherein the change was made at J. S. Newell & Co.'s.

Cross-int. 87. Was the flexible lever used with that machine or applied to it when or before it was brought in?

Ans. In what the change was made at J. S. Newell & Co.'s I cannot exactly state, but when the thirty-four new machines came from J. S. Newell & Co.'s they had this locking arrangement as it is now.

Cross-int. 88. Are you sure it was then as it is now?

Ans. I am sure that when the machines came from J. S. Newell & Co.'s it was then as it is now.

97 Cross-int. 89. Was the sleeve-stripping device or lifter-finger on either of these two new large machines when they came in from Medford?

Ans. It was on one of them at least.

Cross-int. 90. And was the device the same then as now?

Ans. I do not know of any alteration being made.

Cross-int. 91. Was the compound piston die on either one of those two machines when they came in?

Ans. It may not have been on the machine, but we had compound partible dies in Medford.

Cross-int. 92. Was what is pointed out to you as the flattened arbor E on either of those machines when they came in?

Ans. It was on the machine that was sent to J. S. Newell & Co. for a pattern, but when it was put on I cannot tell.

Cross-int. 93. Was what we call the swinging chock on either of those machines when they came in?

Ans. It was on that machine that went to J. S. Newell & Co. for a pattern.

Cross-int. 94. Was the oscillating lever, for moving the slides in feeding plate, on when they came in?

Ans. It may not have been on either of the two large machines, but it was in use without the yielding block prior to coming to Boston.

Cross-int. 95. Can you tell when that oscillating lever, as now shown you, was applied to any machine in your factory?

Ans. In the latter part of 1876, but I cannot fix it more definitely than that.

(Adjourned.)

SEPT. 29, 1882.

Cross-int. 96. Can you state who made the flexible or jointed lever called here the iron spring, Exhibit Z; and, if so, when it was made?

Ans. I believe James S. Newell & Co. made the ones that are now on the machines, and made some of them the latter part of 1876.

Cross-int. 97. Can you and will you produce any bill for the making of that lever from any party?

98 Ans. I don't know that I can, because there might not be anybody to identify it from a bill. I couldn't tell whether it was that spring or some other one.

Cross-int. 98. Is it not usual for a mechanic to identify in his bill what the work charged for was?

Ans. It is when they can, but such small special work may not be designated so that they themselves after a number of years could tell just what it was.

Cross-int. 99. Have you any recollection or knowledge of any

other form of lever used in the place of this iron exhibit at any time?

Ans. I have; we used a spring in connection with this lever that was attached to one of the legs of the machine instead of the trip-hammer.

Cross-int. 100. Do you remember when that was abandoned?

Ans. I could not say when the first one was abandoned, but some of them were abandoned during the latter part of 1876.

Cross-int. 101. Have you any recollection of the lever being used with a straight spring attached to it?

Ans. I have.

Cross-int. 102. And will you state when and where it was abandoned, if at all?

Ans. I would say that the latter part of 1876 or beginning of 1877.

Cross-int. 103. Have you any recollection of this lever being used in connection with the curved spring as exhibited?

Ans. It was used on the new machines.

Cross-int. 104. And will you state when, if at all, it was abandoned?

Ans. It was abandoned the last part of 1876 or beginning of 1877.

Cross-int. 105. How soon thereafter, in your best recollection, was this iron spring, Exhibit Z, substituted for it?

Ans. I could not say definitely.

Cross-int. 106. If a bill should be produced to the Boston Button Company for the making of this iron spring as late as October, 1877, and paid for by the company, should you feel your memory weaken as to the dates you have given?

99

Ans. I would not, because some of those were on the machines that came from James S. Newell & Co. prior to May 10, 1877, and should a bill be presented from some other party dated after that it might be for repairs or otherwise.

Cross-int. 107. Did you make the contract with Newell & Co. for these new machines or the altering of the old ones; and, if so, was it in writing, and did it call for that iron lever, Exhibit Z?

Ans. After certain preliminaries I closed the contract with James S. Newell & Co., in their office, in Loncoln street, and the contract price was based upon the machine shown to them that was running in our factory, but I cannot state whether that contract was in writing. I cannot state whether the iron lever, Exhibit Z, was covered by that contract.

Cross-int. 108. How many lifting devices are you able to recollect as ever having been used or applied to these machines?

Ans. I cannot state whether more than one kind.

Cross-int. 109. What experiments, if any, have been made in the dies used on those machines, and how many varieties can you recall in your connection with them?

Ans. We made new dies as we went into new lines of business; the number I cannot state.

Cross-int. 110. Do you remember any compound piston dies used and abandoned before the one now in use was adopted or substituted?

Ans. I do. I remember one that the centre piece was operated by a spring instead of this attachment as now used; I remember no other.

Cross-int. 111. Do you remember when that was abandoned?

Ans. That was abandoned on some buttons while we were at Medford.

Cross-int. 112. When finally abandoned?

Ans. That I cannot tell, the exact date. I have here a new die which we used at Medford, and is the same in principle as the dies now used. I will say in May and June, 1876, we had large orders and made the two part buttons with compound piston dies,
100 the same as Exhibit Partible Die. I produce and annex the above die, and it is marked "Exhibit Y, W. W."

Cross-int. 113. Could you not have made those same buttons before on the old machines?

Ans. Similar buttons have been made on foot machines.

Cross-int. 114. Referring to your answer to the cross-int. 50, will you state that you are sure that the die referred to therein was made or used while you were in Medford?

Ans. It was made and used while we were at Medford and the buttons made and sold from it.

Cross-int. 115. Who made it, if you know, and when was it made?

Ans. I do not know who made it, nor exactly when it was made.

Cross-int. 116. Referring now to the model, will you look at what we call the frame that holds the yielding block and state, if you can, who made it and when?

Ans. I believe Mr. Leavitt made it some time in the latter part of 1876.

Cross-int. 117. What connection, if any, had the Leavitt referred to with the firm of Hough & Rumney?

Ans. He managed their machine shop and, I believe, had an interest in their business, or rather he managed the machine shop of J. Leavitt & Co., and Hough & Rumney had an interest in it. Afterwards J. Leavitt went out and left them there.

Cross-int. 118. Can you and will you produce the bill for the making of those frames, more or less of them, by any one, at your examination?

Ans. I do not know that I can produce the bills as far back as that.

Cross-int. 119. Will you state, if you know, who made the other parts of the new and altered machines after Newell & Co. had done their part of them?

Ans. J. Leavitt & Co. made most of the other parts. There may have been some parts made by others, but I cannot now recollect who they are.

101 Cross-int. 120. Whether, to your knowledge, any of said parts were made at your factory?

Ans. Yes; there were some made at our factory.

Cross-int. 121. State whether these parts were made after or before Newell & Co. had got through with their work.

Ans. Some were made before and some after. I speak now of the parts necessary to make the buttons.

Cross-int. 122. I refer to the essential parts of the machine not made by Newell & Co. and not to the dies. State when those parts were made.

Ans. The most definite answer that I can give to that is that they were made during the time Newell & Co. were making their parts or immediately after, because it was our plan to have all the parts ready to place on the machine and put it in operation as soon as it came from J. S. Newell & Co., as we were short of machines and behind our orders.

Cross-int. 123. Did you give the order for those various parts?

Ans. I did not.

Cross-int. 124. Can you tell any more definitely when the orders were filled than you have?

Ans. I cannot.

Cross-int. 125. Can you tell any more definitely which of those parts were made in the company's factory?

Ans. I cannot.

Cross-int. 126. Could the yielding blocks and springs have been ordered and made before the frame for holding them?

Ans. They could, but I don't think they were.

Cross-int. 127. Could the orders or order for the iron lever, Exhibit Z, and the various parts not made by Newell & Co. for the old or altered machines have been given and filled before these machines were altered over?

Ans. Some of them were.

Cross-int. 128. You may state precisely what and which.

Ans. The new pistons were ordered before the machines were altered over; that is all I can state definitely; there may have been others.

102 Cross-int. 129. Who gave the order?

Ans. I don't know definitely, but I think Mr. Wade.

Cross-int. 130. How much time did you spend in the machine-shop or machinery rooms of the Boston Button Company in the year 1877?

Ans. I could not state how much, but I was around there during the day a good many times.

Cross-int. 131. Will you state precisely what, if anything, you had to do in those rooms?

Ans. During 1876 and 1877 I was in a great deal of the time for the purpose of pushing forward the work in each department.

Cross-int. 132. How pushing the work in those departments?

Ans. Hurrying up the completion of the machinery, the making of dies, and the executing of orders.

Cross-int. 133. Who did you hurry?

Ans. The heads of all the departments.

Cross-int. 134. Who were the heads of those departments?

Ans. Mr. W. W. Wade was improving the machinery; Mr. George A. Wade was at the head of the department for making covering dies for covering the machines, adjusting them to the machines,

and making the buttons; Mr. Haven was at the head of the department of machinery for making supply parts for the covering machines.

Cross-int. 135. Then you hurried W. W. Wade, Geo. A. Wade, and Mr. Haven?

Ans. Also James S. Newell & Co.

Cross-int. 136. Did you tell the Wades what to do?

Ans. I told them what we wanted.

Cross-int. 137. Did you tell them how to do it?

Ans. I did not.

Cross-int. 138. Did you tell them when to do it?

Ans. Yes; we wanted everything right off.

Cross-int. 139. What was it that you wanted right off?

Ans. The new machines, the new dies, and the new buttons.

Cross-int. 140. Did you know then or do you know now the parts that were required to finish those machines after Newell & Co. got through with their work, precisely and in detail?

103 Ans. I knew some of them that were made by J. Leavitt & Co.

Cross-int. 141. Can you and will you state precisely what had to be done after Newell & Co. had got through and after Leavitt & Co. had furnished those certain parts which you say you knew were required?

Ans. Springs had to be added and the machine adjusted; by adjustment I mean the putting of each part in easy running condition.

Cross-int. 142. Was not the oscillating or swinging lever to be made, was not the yielding block and the springs, and was not the frame for holding yielding block after it was milled out to be finished?

Ans. These devices are not needed upon every machine, nor have we made them for all the machines; therefore I only spoke in my previous answer of those parts that were put on all the machines.

Cross-int. 143. But were they not necessary to finally finish and perfect any one machine?

Ans. For making of certain kinds of buttons these devices are put on.

Cross-int. 144. Were they not necessary for the final perfection in the largest sense of this patented machine?

Ans. That all depends upon the class of work you intend to make.

Cross-int. 145. Were there not several other parts than those you have now referred to and many other things to be done than those mentioned already for the final finishing and perfection of this machine?

Ans. Not that I remember.

Cross-int. 146. From your experience or any knowledge you have of practical mechanics can you tell how long could be reasonably required to do all these necessary things and finally perfect a machine after Newell & Co.'s work was done?

Ans. I can state that after we received the machines from Newell

& Co. some of them were put into operation and were making buttons in a very short time—inside of ten days.

Cross-int. 147. But my question is how long would be required to finally finish—that is, to put on and adjust to working order—every device claimed in this patent?

104

Ans. The time I have stated would cover it.

Cross-int. 148. Would it make any difference whether the other parts were all ready or whether they had to be ordered and made after Newell's machine came in?

Ans. Yes; it would.

Cross-int. 149. Can you tell when every part necessary to the final perfection of any one of these machines came into your factory?

Ans. I cannot exactly, but it was prior to May 10, 1877.

Cross-int. 150. Can you tell whether all these patented devices were put onto one of the new machines or onto one of the old machines altered?

Ans. I cannot now state.

Cross-int. 151. You say that you had some interest in the old patents conveyed to you when you went into the firm; was such conveyance in writing, and from whom, if anybody, did it come?

Ans. It was in writing, and came from Mr. Metcalf and Mr. Wade.

Cross-int. 152. Will you produce it and annex it?

Ans. I will produce it and annex a copy, if it is not already in the case. I find upon examination it is in, as Exhibits C and D and G refer to those conveyances.

Cross-int. 153. Can you state who made the feeeding tables for these machines; and, if so, when?

Ans. I think Mr. Gardner made them. I cannot give the date. We worked some of the new machines without them when first starting some of them. The tables may have been in the factory, but not adjusted to the machines.

Cross-int. 154. Have you any knowledge of any agreement between you and your copartner, other than those papers which have been put in this case, as to the partnership?

Ans. No; none in writing.

Cross-int. 155. Why, then, did you say that Wade's salary was paid to him for the improvement and development of the machinery?

Ans. That was a verbal agreement.

Cross-int. 156. When and where was it made?

105

Ans. It was made when I went into the firm. I speak now of my part of agreement. I believe in the office on Cornhill.

Cross-int. 157. Will you state who was present and precisely what was said?

Ans. There were only the three partners present at that time, that I am aware of, that could hear the conversation. Mr. Metcalf was urging for the further improvement of machinery, and I was urging that Mr. Wade should invent some devices for feeding the different parts automatically; then when we moved to Boston we were still urging Mr. Wade on these new devices, and had quite a conversation

in our office on Purchase street, and at Mr. Wade's request took all other duties off his shoulders.

Cross-int. 158. Is that all the verbal agreement that you refer to?

Ans. I believe his salary was raised from twelve to fifteen hundred dollars per annum at the time of that first agreement.

Cross-int. 159. What were the duties, in their largest extent, which were left to Mr. Wade?

Ans. The improvement and development of the machinery.

Cross-int. 160. Had he any superintendency or supervision of any portion of the work?

Ans. Yes; the construction of the machinery.

Cross-int. 161. Any other duties?

Ans. That's what he was to give his whole time to.

Cross-int. 162. Had he control of the machinists?

Ans. As regards their working on this machinery, he had.

Cross-int. 163. Had he control of the button-makers?

Ans. No.

Cross-int. 164. Who had control of the help in the manufacturing department—that is, hiring and discharging?

Ans. I had.

Cross-int. 165. During all the time after you became a member of the firm? If not, for what time?

Ans. I had a part of the time at Medford; but Mr. Wade objected, and that arrngement was given up. After our factory was moved to Boston I had charge of the help.

106 Cross-int. 166. Were not these new devices, in whole and in part, a great improvement on or over the old patented machines?

Ans. They are an improvement in respect of quantity, quality, and variety of style.

Cross-int. 167. What was the expense, comparatively, of the manufacture of these new devices?

Ans. It was a large expense from the time that the patterns were made in 1872 up to the time the machine was finished.

Cross-int. 168. How would it compare with the increased productiveness and profits of the new device?

Ans. That I cannot state, but we should not have put on these new devices or made these experiments unless we could see some show ultimately for profits.

Cross-int. 169. Do you know whatever became of those three automatic feeding plates or the twelve lifter-fingers that you said were in the inventories of 1873 and 1874?

Ans. I presume we had them when we moved to Boston; that's all I know.

Cross-int. 170. You say you have continued the same business at that same place, notwithstanding all rumors and the way your credit was affected, and notwithstanding the notices given you and appearing in this case; now will you state on what grounds or claims you have so done?

Ans. We have continued in business and have tried to satisfy our creditors that we have a right to do so, and we believe we have, upon

the grounds that we owned the machinery and can pay for our stock and meet all our demands, notwithstanding the rumors that have hurt us.

Cross-int. 171. How soon after the dissolution in October, 1880, did you come down in prices of covered buttons such as are made by Mr. Wade?

Ans. Not until after Mr. Wade had made buttons and quoted prices. I cannot give the exact date, but we never reduced the price until after we had learned from some of our customers the prices which Mr. Wade had quoted.

Cross-int. 172. About what is the productive capacity of one of these machines?

107 Ans. It depends upon what you are making and the speed you are running. Mr. Wade averaged them, I believe, at from ninety to one hundred gross of plain buttons per day.

WILLIAM McCLEERY.

Attest: WINSLOW WARREN,
Special Examiner.

Deposition of Henrie D. Stone.

BOSTON, *Sept.* 29, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Please state your name, age, residence, and occupation.

Ans. Henrie D. Stone; age, thirty-three; Boston, Mass.; foreman of J. S. Newell & Co.'s machine shop, 71 Lincoln street, Boston.

Int. 2. How long have you been so employed?

Ans. As foreman about nine or ten years.

Int. 3. Whether said firm made for the Boston Button Company some button-covering machines at any time and when?

Ans. They did; about May, 1876; commenced about that time.

Int. 4. Can you tell how many new ones you made?

Ans. They came by lots; the first lot was ten; the second lot twelve, and third lot twelve; in all, thirty-four.

Int. 5. Can you give the dates of the delivery of the various lots to the Boston Button Company?

Ans. I can give the dates of the bills to the Boston Button Company. The machines were supposed to have been done there and delivered, perhaps, a day or two after: Sept. 11, 1876, three machines; Sept. 25, 1876, six machines; Oct. 16, 1876, one machine; Dec. 12, 1876, eleven machines; March 29, 1877, seven machines; May 10, 1877, six machines.

Int. 6. Did you also put on new appliances upon twelve old machines after this?

Ans. Some time after the new ones were done, following them right up.

Int. 7. Can you tell when these old machines were all delivered to the Boston Button Company with the new appliances—the alterations?

108 Ans. I can't tell exactly the dates; they followed right after the new ones.

Int. 8. Can you state a date before which they were all delivered?

Ans. I shouldn't dare to state without having my books here or looking at them.

Int. 9. Can you tell by a reference to your books when all these old machines were altered over and delivered to the Boston Button Company?

Ans. I can.

Int. 10. From what did you make these new machines—from drawings or from a sample machine?

Ans. I started the machines from sketches taken by myself of a machine in their factory. As we went a little further along we had some drawings, and before I got the first lot done I had the old machine from the factory; they couldn't spare it at the first start.

Int. 11. Whether the new machines made by you were like the sample machines sent you in all respects?

Ans. They were, except one attachment there for holding the spring, something to do with the pawl or ratchet.

Int. 12. Was that added by you?

Ans. It was.

Int. 13. That appliance or device you refer to was put by you on all the thirty-four machines, and was something that the sample machine did not have?

Ans. The spring holder was added.

Int. 14. Was this same spring holder added to the old machines when they were altered?

Ans. Yes, sir; I think it was; I won't be positive.

Int. 15. Was there any difference, except in the size of the machines, in the twelve old machines after they were altered over and the thirty-four new machines, as far as your work was concerned?

Ans. No, sir; no material difference, except the strengthening of some of the parts where it might need it, as near as I can recollect, except that they were alike; I mean the new machines were like the old ones, except that they were larger and stronger.

109 Int. 16. Have you seen the machines that the Boston Button Company are now running; and, if so, when?

Ans. Yes, sir; yesterday afternoon and at various other times.

Int. 17. Are the thirty-four new machines now used by the Boston Button Company and the twelve old machines and the two large machines the same in all respects as when delivered by you, so far as your work went?

Ans. Yes, sir.

Int. 18. Who ordered and paid for these machines and work by J. S. Newell & Co.?

Ans. Mr. Newell told me the order had been given by Mr. McCleery to go ahead. They were charged to and paid for by the Boston Button Company.

Int. 19. You have spoken of doing this work from drawings and a sample machine. Did you have patterns also?

Ans. I had patterns that we used to get these castings with, patterns of all cast-iron work.

Int. 20. Do you know who made the drawings which were furnished to you?

Ans. I think the young man's name was Davis. I don't know his initials.

Int. 21. Whether or not when you were building these thirty-four new machines you got out the extra parts for the alteration of the twelve old machines.

Ans. Yes, sir; we did.

Cross-examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Cross-int. 22. What personal knowledge have you, if any, of the time when one single one of those thirty-four new machines were delivered to the Boston Button Company?

Ans. The only personal knowledge I could have would be by reading the books and knowing that delivery is always very close upon the sending the bills, and knowing the hurry they were in.

Cross-int. 23. Have you any personal knowledge of the time of the delivery of any one of them?

110 Ans. I couldn't remember the dates. I made no note of it myself.

Cross-int. 24. Can you not now state from recollection or memory that the twelve old machines altered over by you, as you say, were altered and delivered as late as the fall of 1877?

Ans. No, sir; I cannot.

Cross-int. 25. Have you any recollection about it?

Ans. I recollect the changing and repairing, but not the time of delivery.

Cross-int. 26. Will you look at the model shown you and state whether you or the firm made any part of these thirty-four new machines which was above the plate?

Ans. Yes, sir; I made some parts of it above the plate.

Cross-int. 27. Will you now state precisely what parts you made above the plate?

Ans. I made the two uprights B and B^1, the two pistons E and E^1, the two arbors e and e^1, the oscillating chock e^3, the two rods that move the piston i and i^1, the two stationary palls e^2 and e^2, the two cross-braces that tie the uprights together. I don't see anything else. There is one more thing—a piece marked i, i^4, and i^2, which is the sleeve-stripping device or lifter-finger.

Cross-int. 28. Will you state whether those various parts you have enumerated were all completely finished and placed onto the other portion of the frame at your shop, or whether they went up in pieces or parts to be attached and adjusted at the button factory?

Ans. They were made and fitted to their places in our shop, but whether for convenience of shipping the machines were taken apart and they went up in pieces or not I don't exactly remember. They

were fitted, because I tried every part to see that the machines were right before they left the shop.

Cross-int. 29. Will you state, if you know, who made the other parts of those machines as now running? And if you can state by whom, state when they were made and delivered.

Ans. During the building of these machines I believe Mr. Wade told me the dies were being made by Hough & Rumney. I only know as to those parts by hearsay.

Cross-int. 30. Will you look at what is called the lever, and
111 which is marked by the commissioner "Exhibit X, W. W.," and state whether that was the lever that you made and applied to those thirty-four machines and the altered ones, or whether the lever which you did make, instead of having the bent or curved brass spring, as shown in this exhibit, had a straight spring in lieu of the curved one.

Ans. My recollection is that I started to build these levers with a straight spring for the thirty-four machines, but was ordered to stop and substitute another one, but it was not the one with the curved spring.

Cross-int. 31. On your best recollection did not those machines go up to the button factory with that straight spring lever?

Ans. Ten of them did, and we changed them up there.

Cross-int. 32. Have you any recollection of making or applying the lever with the curved spring just exhibited?

Ans. No, sir; I never made a lever with a curved spring.

Cross-int. 33. If, as you say, you altered the lever at the factory what alteration did you make, or to what?

Ans. I substituted a lever similar to one marked d^1 d^2 d^3 d^6.

Cross-int. 34. Will you look at the iron casting marked "Exhibit Z, W. W." and say whether that is the one to which you refer?

Ans. Yes, sir; that is the one, though the first one I made was of brass, but the iron one was subsequently adopted.

Cross-int. 35. Can you tell how much of that was originally of brass?

Ans. According to my recollection it was only to try the experiment, and the piece marked "d^1" in the model was the only part in brass.

Cross-int. 36. Will you state when you first received the pattern and obtained the casting for the iron lever just produced?

Ans. Somewhere near Dec. 21, 1876.

Cross-int. 37. Now, state whether you applied that iron lever to all the thirty-four new machines; and, if so, when did you apply it to them all?

Ans. During the building of the second and third lots those
112 belonging to those lots were applied and also to those already delivered. Men were sent up there for that and applied at their shops.

Cross-int. 38. Will you also state when, if at all, you applied that iron lever to the twelve old machines which you altered over as you say?

Ans. It would be likely to be applied while we were repairing and

altering over those machines. I can't tell the exact date. I could get it by referring to the books.

Cross-int. 39. If it shall appear that the charge for making those iron levers appears on the books of your firm as made in October, 1877, would that entry control your memory as to time?

Ans. I don't think it would, for I don't think that charge can be there, according to my recollection, unless it be some special lot that was made.

Cross-int. 40. Are you sure that your firm or you made those iron levers exhibited at all?

Ans. I am sure they were made in our shop by the firm I work for.

Cross-int. 41. If so, how will the entry be made; what sort of charge will it be?

Ans. I gave them the name of spring holders. Probably the charge will be to the Boston Button Company of twelve spring holders, or whatever number they may be.

Cross-int. 42. Would not the phrase "spring holder" apply equally well to Exhibit X or a straight spring lever?

Ans. I should say it might possibly be called a spring holder, but at the same time I shouldn't have made any separate entry of this on our books, because the straight spring was part of our contract.

Cross-int. 43. But if you made the iron spring marked "Exhibit Z" that would be extra work and would appear?

Ans. Yes, sir.

Cross-int. 44. Do you feel sure that you applied that iron spring to all the new and altered machines that went through your shop?

Ans. I feel pretty sure it was applied to all the new machines. As to the old ones I am not so sure, but in making changes I should have been likely to have done it.

113 Cross-int. 45. If you did not apply this spring to the altered old machines what lever did you apply?

Ans. I can't tell any better, because I should have been as likely to remember this one as any other.

Cross-int. 46. Under whose supervision, if any one's, outside of your own people was this work testified to done?

Ans. Mr. Wade was in and out more or less of the time, and if he had any fault to find on account of poor work or otherwise he came to me, the men being under my supervision. He seemed to be in mostly to hurry us up.

Cross-int. 47. Were not a part of your men set apart or designated to work under the special superintendence or direction of Mr. Wade?

Ans. We had a certain number of men on the machines and one man would be in charge, and if anything turned up that I wanted to call Mr. Wade's attention to I would tell the man to ask Mr. Wade. I mean anything that was not made just right I would see whether Mr. Wade would accept it.

Direct examination resumed:

Int. 48. Whether you yourself, when the order was given for this work or at any time when it was being made or performed, made any entry yourself in any book to enable you to state when the order was given or the work performed.

Ans. We have a set of pass books, where the work of each man and the number of hours is put down. The order for the machines would not appear there, but the work done would, under the charge to the Boston Button Company of ten machines, the way it started.

Int. 49. So that these memorandum books or pass books enable you to state when the work was performed at your shop?

Ans. Yes, sir; for from them the charge was carried in to the blotter, which was done in the office.

Int. 50. In other words, they are the first entries?

Ans. Yes, sir; of the labor.

Int 51. Are those pass books preserved?

Ans. As a general thing, yes.

114 Int. 52. And have you refreshed your recollection as to the date of the performance of this work by a reference to those pass books or by the transcript to other books?

Ans. I took it from that and seeing it in the large books in the office. I have referred to both.

Cross-examination resumed:

Cross-int. 53. But your reference to pass books and other books of the office has not been made so that you are able to state the time of the work and delivery of the twelve altered machines?

Ans. No, sir; I didn't look at them at all, except as I have before stated.

HENRIE D. STONE.

Attest: WINSLOW WARREN,
Special Examiner.

Deposition of Albert Leavitt.

BOSTON, *Oct.* 6, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Please state your name, age, residence, and occupation.

Ans. Albert Leavitt; age, forty-nine; residence, Boston, Mass; machinist.

Int. 2. Whether or not at any time you did any work for the Boston Button Company, making button-covering machines or parts of machines for them; and, if so, when and where?

Ans. I made parts of button-covering machines for them, at 138 Congress street, Boston, in 1875 and 1876.

Int. 3. Please state the name of your concern at that time.

Ans. A. Leavitt & Co.

Int. 4. Will you please to examine the model of the button-covering machine now shown you and state what parts of the same you made?

Ans. I made the top circular plate and the standards and shells and springs of the same, the automatic feeding plate, the yielding block frame. I think that was all I made. I may have made other parts, but I don't recollect.

115 Int. 5. Can you state when you made these parts?

Ans. They were made during those two years; most of it, I think, in 1876. I worked at different times, whenever Mr. Wade ordered the work.

Int. 6. Can you name a date before which all this work was done by you?

Ans. It was all done before November, 1876.

Int. 7. What enables you to fix that?

Ans. That's the time that I left the business.

Cross-examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Cross-int. 8. You say that you left the business November, 1876. To whom did you leave it, or who succeeded you in the business of your firm?

Ans. I left it to the parties who were interested with me, Messrs. Hough and Rumney.

Cross-int. 9. Whether they have continued the business from then to now, if you know.

Ans. I believe they have.

Cross-int. 10. Whether you or your firm kept any books of account or charges in which anything done for the Boston Button Company would appear or did appear.

Ans. It would appear charged as labor against the Boston Button Company.

Cross-int. 11. Have you those books of charges?

Ans. I suppose Hough & Rumney have; I have not.

Cross-int. 12. Will you produce books showing charges for work done for the Boston Button Company in 1875 and prior to November, 1876?

Ans. I will ask for them. I suppose they are in their possession. If they are willing to let me have them I will do it.

Cross-int. 13. When you first did work for the Boston Button Company where was it located?

Ans. At the corner of Purchase and Oliver streets, where they are now.

116 Cross-int. 14. And you did no work for said company till after they were there located?

Ans. No, sir.

Cross-int. 15. How many top circular plates did you make for the Boston Button Company?

Ans. I have no way of knowing how many I made; I don't remember.

Cross-int. 16. Have you no recollection? Would like your best recollection.

Ans. I recollect I made the plates, but don't recollect whether I made a half a dozen or a dozen. The work was brought to me at different times, and I made whatever he ordered.

Cross-int. 17. Do you recollect that you made a half dozen?

Ans. I don't recollect, but think I did. I couldn't swear I made a half dozen.

Cross-int. 18. Will you swear you made three?

Ans. No.

Cross-int. 19. Have you any recollection as to the sizes, if you made more than one?

Ans. The sizes were got at by samples furnished. All my work was got out by samples furnished by Mr. Wade; one already made, a specimen of the work to be done.

Cross-int. 20. Have you any recollection as to the number of standards, shells, and springs you say you made?

Ans. I couldn't give you the number, but I know I made quite a large number of these shells and springs.

Cross-int. 21. Who furnished you sketches or samples or models to make them by, if any?

Ans. Mr. Wade.

Cross-int. 22. Have you any recollection as to the number of feeding plates you made?

Ans. I am in the same condition as to all those parts. I know I made them—quite a number—but how many I don't know.

Cross-int. 23. Have you any recollection as to sizes of feeding plates, if you made more than one?

Ans. I don't think we ever made but one size, and that was like sample furnished.

117 Cross-int. 24. Have you any knowledge what became of these parts you say you made?

Ans. Nothing further than that they were delivered to the Boston Button Company, sent over to the building; don't know who received them.

Cross-int. 25. Do you recollect how many frames for yielding block you made?

Ans. I don't think I made but very few. I know I made some, but how many I don't know; nothing like what I made of the other parts.

Cross-int. 26. Will you swear that the frame or frames you made were identical with the model frame shown you?

Ans. I do; in every particular.

Cross-int. 27. Can you tell from recollection who used the tools or actually made the frame or frames you mentioned?

Ans. I could not.

Cross-int. 28. During the period from February, 1876, to November, 1876, who, if any one, was foreman of your shop?

Ans. No one but myself.

Cross-int. 29. Do you know who succeeded you as foreman in that shop?

Ans. I do; Rufus Gray.

Cross-int. 30. Were these parts which you say you made for the company made on any contract, or was your work on order or by day?

Ans. We done both. Most of the work was by the day, but a contract was made before I left which was finished afterwards.

Cross-int. 31. Do you mean to say that the work you did while you were there was done, any of it, by contract?

Ans. I think it was; that's my impression, but I couldn't swear to it without looking at the books.

Cross-int. 32. Your impression is as to what part done by contract?

Ans. My impression is I contracted for some of these standards and shells and the automatic feeding plates.

Cross-int. 33. Did any other person than Mr. Wade give you orders or make any contract for this work you have mentioned?

118 Ans. I don't recollect that they ever did.

Cross-int. 34. Have you any objection to the examination of Hough or Rumney as to any entries on your old books touching this work during this time, if they will produce them?

Ans. No; I have not.

Cross-int. 35. Was this contract which you say was taken before you left, but fulfilled by your successors, a contract to do just these same parts which you have been mentioning, or had it reference to other things?

Ans. It was to do more of these very same parts.

ALBERT LEAVITT.

Attest: WINSLOW WARREN,
Special Examiner.

Deposition of Edward N. Lord.

BOSTON, *Oct.* 6, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Please state your name, age, residence, and occupation.

Ans. Edward N. Lord; thirty-two; Wakefield, Mass.; machinist in the Boston Button Company.

Int 2. When did you first go into the employment of the Boston Button Company?

Ans. In September, 1876.

Int. 3. Have you been there ever since?

Ans. No, sir; I left in December, 1878, and returned January, 1882.

Int. 4. Whether you did any work in the fall of 1876 upon button-covering machines for the Boston Button Company; and, if so, what work you did—I mean after the machines were brought in from J. S. Newell & Co. and from Leavitt & Co.

Ans. Yes, sir; fitting up and putting into order to run.

Int. 5. What time did it require to put each machine in order to run after they came from Newell & Co.?

Ans. Some of them had a great deal more to do than others. I should judge, on an average, that a week would cover each one.

119 Int. 6. When did you do the work which you did upon these machines?

Ans. At the first of my being there.

Int. 7. That is, you mean the fall of 1876?

Ans. Yes, sir.

Int. 8. Will you please to examine the model shown you and state what work or parts or appliances you made to these machines after they came from Newell & Co.'s?

Ans. There was nothing made there particularly. The various parts were brought there and fitted on afterwards.

Int. 9. Then what you did chiefly after these machines came in was to set them up and adjust these parts and prepare the machines for use?

Ans. Yes, sir.

Int. 10. Whether you put on the device known as the yielding block frame and spring.

Ans. Yes, sir.

Int. 11. Do you know who made it?

Ans. I didn't know, but I supposed Mr. Leavitt made it.

Int. 12. When did you do this?

Ans. Soon after I went there, within three or four months, I should say.

Int. 13. Please state whether the locking arrangement used in the various machines of the Boston Button Company is the same as that upon that model.

Ans. It is.

Int. 14. Did you put the locking arrangement upon all of the machines, or did some of them have it on when they came from J. S. Newell & Co.?

Ans. I put it on some of them. Some had it on when they came from J. S. Newell & Co.

Int. 15. Whether, when you were fitting up these new machines, you had to work any overtime.

Ans. I did.

Int. 16. Whether these machines now in use by the Boston Button Company are the same, with the same appliances, in all respects as when you left, in December, 1878?

Ans. Yes, sir.

120 Cross-examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Cross-int. 17. Who hired you in September, 1876?

Ans. Mr. Wade.

Cross-int. 18. Under whose superintendence were you as a machinist to December, 1878?

Ans. Mr. Wade and his son George.

Cross-int. 19. Did you work by the day or month, or how?

Ans. By the day.

Cross-int. 20. Where did you work?

Ans. At the factory, in the same room where they made the buttons, where we had some machinists' tools and appliances.

Cross-int. 21. Do you know how many machines came from Newell & Co. to the factory?

Ans. I don't know the exact number.

Cross-int. 22. Do you know when they came?

Ans. In different lots. There were one or two, I think, there when I went to work, and then they came in different lots.

Cross-int. 23. Do you know how late the last ones came?

Ans. No, sir.

Cross-int. 24. Do you know of any old machines being altered over by Newell & Co. or anybody else?

Ans. Yes, sir.

Cross-int. 25. Can you tell us when they were so altered over?

Ans. The time when the new ones were coming in. The old ones were going out and the new ones coming back at the same time—about the same time.

Cross-int. 26. Can you tell when the last ones were returned to the factory?

Ans. No, sir.

Cross-int. 27. You say you were employed in fitting up and putting into running order these machines. Did you work alone on them; and, if not, who worked with you?

Ans. I worked alone.

Cross-int. 28. How many machines did you alone fit up into running order?

121 Ans. I don't know.

Cross-int. 29. Did you fit each machine to run for the same purpose or end in button-making or in different degrees for different buttons?

Ans. They were all fitted alike in the first place up to a certain degree, and then afterwards other appliances were put on.

Cross-int. 30. For what were the other appliances put on?

Ans. For making different styles of buttons, such as canvas back.

Cross-int. 31. Can you state when you fitted up any one machine with all the appliances that have ever been put on?

Ans. I think that same fall, the first of my being there, 1876.

Cross-int. 32. Can you tell when every one of the parts that have ever been applied to any one of the machines were delivered at the factory?

Ans. No, sir; I don't think I can.

Cross-int. 33. You could not finally complete a machine until all the parts were there, could you?

Ans. No, sir.

Cross-int. 34. Can you tell from recollection now whether the first machine that ever was fully fitted up with every one of the parts that

have ever been applied was one of the new machines or one of the altered old machines?

Ans. I don't think there was any of the machines that ever had all the appliances on—that is, for making canvas-back buttons and rim-edged buttons too.

Cross-int. 35. You say that it would take you, on the average, about a week to fully fit up one of these machines after they came from Newell & Co. Do you mean that you could put on every one of the parts that have ever been applied or can be in that time?

Ans. Yes, sir.

Cross-int. 36. But to do that would require every part to be already at hand for you?

Ans. Yes, sir.

Cross-int. 37. Will you state the exact time when you ever put on the frame, yielding block, and spring onto one of those machines?

122 Ans. Within three or four months from the time I went there to work.

Cross-int. 38. Could it have been earlier than May of 1877?

Ans. Yes, sir.

Cross-int. 39. Do you know who made those parts?

Ans. No, sir.

Cross-int. 40. They were not made in your shop?

Ans. No, sir.

Cross-int. 41. Will you swear whether you put it onto one of the new machines or to one altered over first?

Ans. It was one of the old ones, I think. Whether it had been altered then or not I could not tell.

Cross-int. 42. Have you any recollection of any experiments or other form of yielding block and frame other than the ones as shown you in the model?

Ans. No, sir.

Cross-int. 43. Have you any recollection of any experiments or other form of locking arrangement other than the one as shown you?

Ans. Yes, sir.

Cross-int. 44. Whether the first form that you recollect was like Exhibit X, shown you, but with a straight spring?

Ans. I have seen them with a straight spring and a curved one; don't know which I saw first.

Cross-int. 45. Can you tell which form of spring was on the machine that first came from Newell & Co.?

Ans. The curved spring.

Cross-int. 46. How long were the machines run or any of them with the curved spring?

Ans. Right off; within a short time we changed to the form now on the model.

Cross-int. 47. Can you tell whether that change was first applied to the new or the altered old machines?

Ans. On the new machines, I think.

Cross-int. 48. The same spring holder or form would not do for both the new and old machines, would they?

Ans. No, sir.

123 Cross-int. 49. Were not a great many other kinds of machines being made for the factory at the same time that these covering machines were being made and altered?

Ans. I could not say.

Cross-int. 50. Do you not remember such other machines being brought into the factory about this time?

Ans. I know other machines were being made, but I cannot fix the time.

EDWARD N. LORD.

Attest: WINSLOW WARREN,
Special Examiner.

Deposition of Henry B. Metcalf.

BOSTON, *Oct.* 21, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Please state your name, age, residence, and occupation.

Ans. Henry B. Metcalf; fifty-three; Pawtucket, R. I.; business agent of Pawtucket Hair Cloth Company and partner with William McCleery in the button business, under the style of the Boston Button Company.

Int. 2. When did you first become connected with Mr. Wade, the complainant, in the button business?

Ans. On or about May 30, 1868.

Int. 3. Was anybody else connected with you in the business at the outset?

Ans. My associates at that time were W. W. Wade, George A. Wade, his son, Daniel G. Littlefield, Alfred H. Littlefield, Joseph N. Pierce, Jr.

Int. 4. These were stockholders, were they not?

Ans. Yes, sir; in a corporation under the general laws of the Commonwealth.

Int. 5. What was your next connection with Mr. Wade in the button business?

Ans. A partnership relation with him; when the corpora-
124 tion lapsed the business continued as a partnership, Mr. George Wade having withdrawn, as I now remember, about December, 1868.

Int. 6. What became of the stock of the old corporation?

Ans. It came into the hands of the partnership, there being in that connection no change of interest.

Int. 7. What partnership?

Ans. The partnership composed of Mr. Wade, Mr. D. G. Littlefield, Mr. A. H. Littlefield, Mr. Pierce, and myself.

Int. 8. What became of that partnership and what partnership succeeded it?

Ans. Mr. Pierce becoming indebted to his associates, the Messrs. Littlefield and myself, his interest passed into their hands in settlement; Mr. D. G. Littlefield acquired the interest of Mr. A. H. Littlefield; at a later date I acquired the interest then owned by Mr. D. G. Littlefied; at about the time of the last named I sold a portion of my interest and Mr. Wade sold a portion of his to Mr. McCleery, leaving the partnership Wade, McCleery & Metcalf.

Int. 9. When did Mr. McCleery come in as a partner?

Ans. Jan. 1, 1875.

Int. 10. When Mr. McCleery came in, what were the respective portions of interest.

Ans. Mine was one-half; Mr. Wade and Mr. McCleery one-quarter each.

Int. 11. And was it changed or did it remain the same during the existence of the partnership?

Ans. It remained unchanged.

Int. 12. When Mr. McCleery came in where were you doing business; where was your factory?

Ans. At Medford, Mass.

Int. 13. Before that, where?

Ans. Winchester, Mass.

Int. 14. Can you tell when you moved your factory to Boston?

Ans. Early in 1876.

Int. 15. At the time of your removal to Boston how many button-covering machines had the concern, old and new?

Ans. Fourteen; twelve old and two new.

Int. 16. Please state how you came by the twelve old machines.

125 Ans. Four were in the original plant that was purchased by the corporation from Mr. Wade; eight were purchased, with many other machines, tools, merchandise, and supplies, from the American Button Company, which I think failed, but certainly gave up business; that company did business in Causeway street, Boston.

Int. 17. How did you come by the two new machines?

Ans. They were built at the expense of the company while in business at Medford.

Int. 18. After you moved to Boston state how many additional machines were made.

Ans. Thirty-four new ones.

Int. 19. Were the thirty-four new machines like the twelve old ones?

Ans. No; they were larger and had sundry improvements upon them.

Int. 20. Were new appliances placed upon the twelve old machines after you came to Boston?

Ans. I understand them to have been.

Int. 21. When was the dissolution with Mr. Wade?

Ans. At or about October, 1880.

Int. 22. At the time of that dissolution you purchased his interest and he left the concern?

Ans. Mr. McCleery and I bought him out.

Int. 23. At that time how many button-covering machines were in the use of the company?

Ans. Forty-eight.

Int. 24. And you have the same machines now in use, have you not?

Ans. We have.

Int. 25. Whether any salary was paid in addition to the interest of the partners, and to which of them, and what?

Ans. In the early days a salary was paid to Mr. Wade and myself, and when Mr. McCleery came in he also had a salary. As I recall it, without reference to books, Mr. Wade's was from $1,000 to $1,500 at different times. Mr. McCleery's salary, during latter part of time, was $1,500. I don't remember what it was earlier. Mine was $300 at all times.

126 Int. 26. What were the duties of Mr. Wade while a copartner with you and Mr. McCleery?

Ans. Mr. Wade was at all times recognized as a constructor, inventor, and improver of machinery, and that duty was assigned to him.

Int. 27. When he applied for a patent for the improvement of the machines, what we have spoken of as the second patent, were you or not aware of his application?

Ans. I was not.

Int. 28. When did you first learn of his application?

Ans. I am unable to fix the date, but it was after there had been considerable talk of the dissolution of the firm, and I think it must have been nearly at the time when Mr. Wade advertised a dissolution.

Int. 29. When you learned of this application for a patent by him what took place; what, if anything, did you say to him?

Ans. I protested against it, and, as nearly as I can remember, denounced it as an attempted fraud upon his partners.

Int. 30. Why did you do so; upon what grounds?

Ans. Because, as I understood the matter, the devices for which he had claimed patents belonged to Mr. McCleery and myself as much as to him, having been paid for with the company's money and habitually used as the company's property.

Int. 31. When Mr. Wade obtained his first patents, whether at that time he was associated with you in any way in business?

Ans. He was; they were obtained in 1869.

Int. 32. At whose expense?

Ans. At the expense of $363.55, paid by the company—that is, one; can't give the expense of the other.

Int. 33. Whether or not one-half of those patents was assigned to you?

Ans. It was.

Int. 34. Whether you paid anything for such assignment?

Ans. I did not.

Int. 35. At whose suggestion were these patents taken out?

Ans. At mine.

Int. 36. All these old machines which you brought to Bos-
127 ton were altered, and the new machines were made and improved at the expense of the Boston Button Company?

Ans. They were.

Int. 37. Can you state a date by which these thirty-four new machines were completed and the twelve old machines altered and ready for use in your factory in Boston?

Ans. I can fix a time, but can't be very accurate, as I have not charged my mind with that matter. I should say that it was by or before the close of 1878, it would seem to me.

Int. 38. There was an attempt at dissolution, was there not, before the actual dissolution in October, by Mr. Wade?

Ans. There was, by an advertisement signed W. W. Wade.

Int. 39. When was that?

Ans. I think it must have been about July, 1880.

Int. 40. What was its effect upon the affairs and interests of the concern?

Ans. It provoked considerable inquiry as to the financial standing of the concern, and compelled a good many explanations as to our financial strength.

Int. 41. You say you and Mr. McCleery purchased Mr. Wade's interest in the concern; what did you pay him therefor?

Ans. It was either $12,000 or $12,500; I think $12,000.

Int. 42. Whether or not after the dissolution Mr. Wade went into the button business himself, alone or with others?

Ans. He went into business in Chardon street, Boston, and he has testified who his associates were.

Int. 43. What was the effect of his competition, if anything, upon the price of buttons?

Ans. The prices of some styles of buttons were greatly reduced. I have reason to believe the reduction pertained to the styles he made.

Int. 44. Whether or not your concern reduced your prices; and, if so, why?

Ans. We reduced prices in order not to lose our trade, but, so far as I can lern, never in any case below his figures, and never to any customer unless we had reason to believe that that customer
128 had been offered lower prices by some other party; and I have knowledge of at least one considerable sale at prices lower than we ever quoted.

Int. 45. Whether or not at any time your concern reduced its prices to injure the concern of Mr. Wade?

Ans. Never.

Int. 46. Whether at any time Mr. John T. Ellis was a partner with you and Mr. Wade?

Ans. He never was.

Int. 47. What were your relations to him?

Ans. He acted as book-keeper and received a salary therefor.

Int. 48. Do the books show that?

Ans. They do.

Cross-examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Cross-int. 49. After Mr. D. G. Littlefield was ready to or did convey his interest to you, was there anything said between you and Mr. Wade with regard to Mr. Ellis becoming a partner in his (Littlefield's) place?

Ans. There was.

Cross-int. 50. Can you fix the time when you acquired Mr. Littlefield's interest?

Ans. It was at about the time Mr. McCleery entered the firm.

Cross-int. 51. Now, will you state what did pass between you and Mr. Wade with regard to Mr. Ellis being or not being a partner?

Ans. Mr. Littlefield, who lives in Rhode Island, had never taken an active part in the business, but for some time prior to his leaving was a good deal disaffected with the management of the business, and complained a good deal, especially of Mr. Wade. Mr. Ellis, being out of business and thinking that by his personal presence and attention he could help to correct a good many of the defects in the management, suggested the purchase by him of Mr. Littlefield's interest. As such an arrangement seemed likely to be satisfactory to all concerned, I asked Mr. Wade if it would meet his approval, to which he replied in the affirmative. I then proceeded to negotiate with Mr. Littlefield, using some little time, though there was no delay that could be avoided. Mr. Ellis was at this time assisting the
129 concern as to its book-keeping. Before I had absolutely completed any negotiation with Mr. Littlefield, Mr. Ellis became distrustful of the business; but I had gone so far with Mr. Littlefield and had so far committed myself to him that I took and paid for his interest with the uncertainty whether or not Mr. Ellis would take it off my hands. Without any positive settlement with Mr. Ellis on the subject, he continued to become more and more dissatisfied. The concern owed him considerable money he had loaned; so that finally I raised the money that the concern had borrowed from him and released him from all obligations, taking the thing, for better or for worse, on my own shoulders.

Cross-int. 52. Do you think from what was said between you and Mr. Wade, at the time and after he assented to Mr. Ellis's coming into the concern, that he had any grounds to believe that he was taken into the concern with Mr. Littlefield's interest.

Ans. I have always believed, until I heard Mr. Wade's testimony a few days since, that he understood the matter in all its parts precisely as I did myself. I am not conscious of having withheld from him any information I possessed myself.

Cross-int. 53. Will you examine the letter of Sept. 18, 1876, which the commissioner will mark "Exhibit S, W. W.," and say if it is your letter to Mr. Wade?

Ans. It is unquestionably my letter.

Cross-int. 54. Will you state whether, up to the time of your purchase of Mr. Littlefield's interest, your relations with Mr. Wade had been pleasant socially and in a business way?

Ans. Socially, pleasant up to nearly the time of dissolution; in a business way, more or less critical. I presume I found fault, more or less.

Cross-int. 55. Can you not recall conversations with Mr. Wade or correspondence in which Mr. Wade found fault and protested in spirit or substance that you had acquired Mr. Littlefield's interest and thereby become half owner in the concern?

Ans. I do not believe that I ever had a letter from him in which reference was made to the matter, or that it was ever referred to in conversation. If it has been I have entirely forgotten it. I
130 can recall nothing that indicates that it was other than fully understood and satisfactory.

Cross-int. 56. Can you recall any statements made to Mr. Wade, orally or otherwise, to the effect that Mr. Ellis was not a partner according to the tenor of your letter just exhibited?

Ans. I have heard conversations, certainly more than one, wherein both Mr. Ellis and Mr. Wade participated, in which Mr. Ellis treated the question of partnership as one still under consideration and not settled, and I think Mr. McCleery also heard the conversations.

Cross-int. 57. Were the conversations which you say you heard before or after the date of the letter exhibited?

Ans. After.

Cross-int. 58. Can you state when?

Ans. I cannot.

Cross-int. 59. Has not Mr. Wade in substance found fault with you or objected to your having purchased Mr. Littlefield's interest alone and without consultation with him or not for joint benefit?

Ans. Never in the slightest degree.

Cross-int. 60. When the Boston Button Company, as a corporation, was organized, at what price was the business taken from Mr. Wade?

Ans. I should say it was between $3,000 and $4,000. On this, as on some other points, I am unable to be strictly accurate, a cash book having been lost.

Cross-int. 61. Of this amount what portion did you, as an individual, contribute?

Ans. As I now remember, $1,000.

Cross-int. 62. When the partnership was formed between yourself, Littlefield, Pierce, and Wade, whether the assets were then appraised as the basis for the partnership?

Ans. There was no specific transfer. Inasmuch as all the property and obligations belonged to those parties, there was no occasion for an appraisement.

Cross-int. 63. When the partnership with McCleery, Wade, and yourself was formed, was there then any appraisement or agreed value of assets as a basis for the firm; if so, what was it?

131 Ans. There was. An inventory was taken, dated Nov. 7, 1874, and it was mutually agreed that the partnership which took place Jan. 1, 1875, should share as to profits and losses upon

the basis of such inventory. The amount of capital, as then adjusted, was $20,000.

Cross-int. 64. Up to this time had you contributed to the capital stock in any way except the $1,000 which you have mentioned; I do not mean by loans, but by contribution to the capital stock?

Ans. I had through the parties whose interests I bought out.

Cross-int. 65. Had you contributed in any other way than by these purchases?

Ans. Other than by loans, none that I remember.

Cross-int. 66. Can you remember what the assets of Mr. Wade were when the corporation of the Boston Button Company was formed?

Ans. As I now recall it, $2,900.

Cross-int. 67. Who was president of the Boston Button Company when formed?

Ans. Mr. W. W. Wade.

Cross-int. 68. Who was treasurer?

Ans. I was.

Cross-int. 69. Whether after the lapse of the corporation, whenever it was, these names of president and treasurer were continued in use?

Ans. They were.

Cross-int. 70. Whether during the partnerships that have been mentioned you did not sign checks or other papers as treasurer?

Ans. Yes, and do so now.

Cross-int. 71. Since the formation of the partnership between McCleery, Wade, and yourself have you contributed to the capital stock any money; and, if so, how much, other than by loans?

Ans. Strictly as capital stock, nothing; but on open account the transactions have been large. What the balance would be I could not tell without examination.

Cross-int. 72. Was there any patent on the eight machines which you say were bought of the American Button Company?

132 Ans. There was certainly a patent on the style of machine we bought of them.

Cross-int. 73. Whose patent, or granted to whom, and for what was the patent?

Ans. A patent issued for machine for making covered buttons, dated April 27, 1869, No. 89450, to W. W. Wade, one-half of which was assigned to me.

Cross-int. 74. Do you mean to say that those eight machines, when bought as stated, were covered by Mr. Wade's patent that you named?

Ans. I am unable to give accurately the date of our purchase of the eight machines referred to, but they are certainly identical with the specifications and claims of the patent referred to.

Cross-int. 75. Did not Mr. Wade make improvements on those eight machines and then take out his patent which you have referred to?

Ans. He did not.

Cross-int. 76. If those machines were bought at the formation of the corporation in May of 1868 and Mr. Wade's patent was taken

out in April 27, 1869, how could they be covered at the time of purchase by that patent?

Ans. They were not bought at that time. My reference to any patent application refers to devices and patent descriptions.

(Adjourned.)

OCT. 24, 1882.

Cross-int. 77. Can you tell what improvements, if any, were made to those purchased machines before Mr. Wade's application for the patent you have spoken of?

Ans. I cannot.

Cross-int. 78. You say Mr. Wade's service in the partnership was in connection with the machinery and its improvements. Do you mean that it was confined to the same?

Ans. Referring to my previous answer, I mean that, so far as mutual agreements were concerned, it was so confined.

Cross-int. 79. Mutual agreements with whom?

Ans. Between all the partners.

Cross-int. 80. Do you mean to say that Mr. Wade agreed
133 that he would have nothing to do, or do nothing, in the business except in connection with machinery and its improvement; and, if so, was it orally or in writing, and when was it?

Ans. So far as I remember, there are no written agreements on this subject. I mean by what I have stated simply to say that, by mutual agreement of all the parties, certain duties were assigned to Mr. McCleery, certain duties to myself and to Mr. Wade, as I have testified.

Cross-int. 81. Will you now state when any such mutual agreement was made?

Ans. To the best of my recollection, about the year 1876. I have memoranda by which to fix the date precisely.

Cross-int. 82. Did Mr. Wade in fact confine his service to machinery from 1875 till the dissolution?

Ans. In fact, Mr. Wade's application was very desultory and irregular. I frequently remonstrated with him, because by doing things that he ought to have sent a boy to do, he neglected the important duties that should have devolved upon him.

Cross-int. 83. Did he not in fact draw checks, buy and sell, hire and discharge help, and do other services naturally devolving upon what you call the president of the company to a greater or less extent all through the years?

Ans. I have no recollection during that time that he drew any checks, and think he did not except in case of sickness or other unavoidable absence of the other parties. During the time named he neither bought nor sold goods, unless he may have purchased petty supplies. I am sure he did not purchase any of the general stock. I have no knowledge that he hired help or dismissed help and believe he did not. As to the office of president of the company it had no functions as such during the time named.

Cross-int. 84. What portion of the time were you at the Button Company's factory?

Ans. It would be impossible for me to tell. During most of the time my visits were very irregular; sometimes very frequent, and then again considerable time would elapse without my being there.

Cross-int. 85. Were you there every week?

134 Ans. According to the best of my recollection, my visits would average oftener than once a week.

Cross-int. 86. You say that the service you have mentioned was assigned to Mr. Wade. Will you please state who assigned it?

Ans. I mean that the three parties mutually agreed that each would do as stated.

Cross-int. 87. You also state that certain salaries mentioned were fixed. Will you please state who fixed them?

Ans. It is impossible to be very definite in relation to that. I should say that when the concern was first started Mr. Wade named a salary that he ought to have, and I named a salary that I ought to have, and, with very little discussion or controversy, it was accepted. It seems to me probable that a formal vote of either the corporation or the directors was taken on that subject, although I cannot swear to it. At a subsequent date Mr. Wade expressed the opinion that his salary ought to be increased, and I assented to that promptly.

Cross-int. 88. You say that, without being able to fix a time exactly, you did not know of the application by Mr. Wade for his new patent until not far from the time that he advertised the dissolution. Will you state whether you did not know before that time that Mr. Wade had made certain improvements for or on the covering machines?

Ans. I certainly knew that improvements were made, under the direction of Mr. Wade, on the Boston Button Company's machines years before.

Cross-int. 89. At the time of your learning of his application for this patent had there not already been talk about a dissolution of the firm?

Ans. There certainly had been talk of dissatisfaction, and I think dissolution had been talked of, but I am unable to fix the date when dissolution took place. Dissolution had been talked of before July 1, 1880.

Cross-int. 90. Will you state what cause, if any, Mr. Wade alleged or urged for this dissolution, clear up to the time of actual dissolution?

Ans. He claimed that he was not well treated because his
135 partners wouldn't intrust him with the general management of the factory.

Cross-int. 91. Did he not claim that he was entitled to a larger share or interest in the business by virtue of what it had been made by his inventions on the machinery, in substance?

Ans. Never, to my knowledge.

Cross-int. 92. Did he not offer to the company or to you all his improvements, or the benefits of them, in consideration of his receiving a larger interest in the business?

Ans. Not to my knowledge.

Cross-int. 93. Was there not much talk and much correspondence on that subject?

Ans. There was no talk on that subject as pertains to conditions on which the partnership should be continued, as Mr. McCleery and myself always insisted that those improvements belonged to us. There was a good deal of talk and some correspondence as to the methods of settlement in the event of dissolution.

Cross-int. 94. Did he not offer to sell to you or the company his improvements long before the dissolution on certain terms?

Ans. I have no recollection of any proposition of that kind except coupled with a plan of dissolution and his withdrawal.

Cross-int. 95. Did he not offer to buy or sell, including his improvements, on the same basis?

Ans. He did not.

Cross-int. 96. Did you not write him a letter stating, in substance, that you would not buy and that he could not?

Ans. I certainly wrote him that I could not buy at the price he quoted. I asked him if he meant by his letter to me to offer to either buy or sell at the price named. He said he did not; he only offered to sell. In that letter, or by other letters or conversations—probably both—he gave as his reason for not wanting to buy that he hadn't the means for so large an enterprise. If I said he could not buy, such a remark was based upon his own statements.

Cross-int. 97. Was not the substance of these conversations and correspondence connected with and having reference to these improvements now in controversy?

136 Ans. So far as I was concerned, no, as I never admitted any special rights of Mr. Wade therein.

Cross-int. 98. Did you ever see the model of this patented machine in controversy that was used in the application for his patent; and, if so, when and where?

Ans. I never saw the model.

Cross-int. 99. Do you know whether or not it was at the office of the Button Company before it was sent on to Washington?

Ans. It was not, to my knowledge.

Cross-int. 100. When you learned that the application for the patent had been made, what did you say in reference thereto to Mr. Wade?

Ans. I can't remember the conversation. I remember only that I was indignant and denounced the proceeding.

Cross-int. 101. Did you not say that he should not get them?

Ans. Not that I remember, but I should not want to deny it.

Cross-int. 102. Did you or not go to Washington after you knew the application was filed, and say, in reference to so going, that you were going to prevent the granting of that patent?

Ans. I certainly went to Washington very frequently, because I had business there, but never for that purpose. As a matter of fact, I never conferred with any government official on the subject. What I may have said in the excitement of the hour it is impossible to remember.

Cross-int. 103. Did you ever request or ask or demand that this

patent should be taken out for the benefit of the company or yourself in connection with Mr. Wade?

Ans. When I learned that an application was pending I certainly declared that if a patent was to be taken it should belong to the company.

Cross-int. 104. What answer did Mr. Wade make to such claims?

Ans. I can't remember the form of his answer.

Cross-int. 105. When the patent of 1869 was assigned to you—one-half of it—did you at that time, or just before that time, request that it be assigned to the company that then existed, and did
137 you prepare an assignment for that end, with the request to Wade to execute it?

Ans. I have no recollection that any form of assignment was prepared or requested, except the one actually executed. My recollection is that Mr. Wade and I were in entire concurrence that the matter had better rest in the hands of either him or me, with a license to the Button Company to use.

Cross-int. 106. Will you look at the paper now handed you and state if you did not have at one time a feeling or desire different from what you have just expressed, and did you not prepare that as an assignment to the company?

Ans: The paper handed me is in my handwriting, and is a form of assignment direct to the Boston Button Company, the preparation of which I had forgotten. My previous answer gives all further explanation of it that I am capable of giving.

Cross-int. 107. You have stated that that patent of 1869 was taken out at your suggestion. Will you state what you mean by that?

Ans. I remember very distinctly Mr. Wade's demurral to taking out a patent, he stating the large number of patents he had taken and the amount of money he had expended therefor without any profit. He thought it would be a waste of money.

Cross-int. 108. You say he did assign one-half of that patent to you as an individual without consideration. Now, do you think from all your talk and correspondence with Mr. Wade that he would have hesitated to have conveyed one-half of his new patent to you as an individual if he could have owned and had the entire benefit of the other half of the same?

Ans. In view of the fact that he did at one time own nearly one-half of the entire business and voluntarily sold a part of it and took the money for it, I have no reason to suppose that his actual actions as to the patent were at all influenced by the question of what was his proportionate influence in the business.

Cross-int. 109. Has Mr. Wade not said verbally and in writing, in various ways, that if he and his invention could be recognized to the extent of one-half interest in the Boston Button Company that you should have, or the company, one-half this patent?

138 Ans. Not to my recollection.

Cross-int. 110. Will you state how early or at what time you have personal knowledge that Mr. Wade broke the price of any kind of covered buttons?

Ans. Of my personal knowledge I can't give any dates with any

approach to accuracy. I have personal knowledge of only a single sale which is lower than any sale ever made by the Boston Button Company, as I am informed and believe. The sale to which I refer was made to a concern in which I am pecuniarily interested.

Cross-int. 111. When was it made, and what is or was the concern?

Ans. I cannot give the date, as I have before testified; think it to have been during the present year. The party buying was George S. Harrington.

Cross-int. 112. Can you tell how soon after October, 1880, Mr. Wade had a single button-covering machine in operation?

Ans. I cannot.

Cross-int. 113. Can you tell when he had two?

Ans. I cannot; don't know how many he has now.

Cross-int. 114. Will you state the date at which your company first sold any buttons under usual price?

Ans. I cannot without reference to the books.

Cross-int. 115. Can you tell when Mr. Wade first sold any buttons under price, if at all?

Ans. I cannot now.

Cross-int. 116. What do you mean, then, by stating that Mr. Wade broke prices, and so compelled you to do so on certain kinds of buttons?

Ans. Any testimony that I could give on that point must be mainly derived from information from my partner, who sells the goods.

Cross-int. 117. With your long-established business and command of the markets, and with forty-eight machines and all your facilities for manufacture and sale, do you still think that you were obliged to break prices if Mr. Wade started no machine till a year after dissolution and up to to-day only runs three or four?

Ans. I think that no manufacturer who intends or expects
139 to hold the confidence of the customer can defend and maintain prices above what are offered by any competitors.

Cross-int. 118. Have you not said and do you not know that your partner has said from the time of the dissolution until now you would cut prices, or in substance and intent that?

Ans. No; nor nothing resembling it.

Cross-int. 119. Have you not said that you would ruin Mr. Wade and anybody with him that had not a hundred thousand dollars if he or they made or attempted to make covered buttons, or in substance or general intent that?

Ans. No; nor nothing like it.

Cross-int. 120. Have you not said that in substance to Mr. Wilde, of the firm of Lawrence, Wilde & Hull?

Ans. No; nor nothing like it.

HENRY B. METCALF.

Attest: WINSLOW WARREN,
Special Examiner.

EXHIBIT S, W. W.

OFFICE OF PAWTUCKET HAIR CLOTH COMPANY,
PAWTUCKET, R. I., *Septem.* 18, 1874.

DEAR WADE: I expected and intended to have seen you ere this, but a variety of causes have prevented.

I have completed the negotiation between Mr. Ellis and Mr. Littlefield, so that the former now takes the place of the latter. I fully believe that the interests of all concerned will be promoted by this arrangement. I shall be much surprised if on acquaintance Mr. W. and Mr. E. do not as highly esteem each other as Mr. M. does both of them.

I desire, as early as may be practicable, to reach an adjustment of all of our mutual interests, as well as that of Wm. McCleery, and shall be glad to have you consider all the points involved whenever you have leisure, if that time ever comes. I am not so anxious as to amounts of money involved as I am to get "cleaned up" and "straightened out" according to almost any plan that is equi-
140 table. If you think me a bit "notional" on such points pray charge it to some of my rough experiences during the last two years.

I am all alone in the office this week, Mr. L. being at Florence and Mr. McNiven at Boston "cleaning up" the books of P. C. & Dorr.

I may come to Boston on Monday, but probably not until Wednesday.

Yours, METCALF.

Evidence for Complainant in Reply, Taken Pursuant to the Sixty-Seventh Rule of the Supreme Court of the United States, in Equity, as Amended, Before me, Winslow Warren, Special Examiner.

Present: Baxter E. Perry, Esq., of counsel for complainant; Henry C. Hutchins, Esq., of counsel for defendants.

Deposition of Rufus P. Gray.

BOSTON, *Nov.* 13, 1882.

Direct examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Int. 1. State your name, age, residence, and employment or business.

Ans. Rufus P. Gray; thirty-nine; Boston, Mass.; machinist.

Int. 2. Please state in whose employ you were in the years of 1876 and 1877 and 1878.

Ans. A. Leavitt & Co. in 1876. In 1877 it was changed to Hough & Rumney.

Int. 3. State what their business — and where it was.

Ans. They were machinists, doing business — 138 Congress street, Boston.

Int. 4. If at any time A. Leavitt withdrew or went out of that firm please state when it was.

141 Ans. He withdrew in November, 1876.

Int. 5. What was your position or special service in the business of those firms?

Ans. With A. Leavitt & Co. I worked by the hour; with Hough & Rumney I worked—I had charge of their shop as foreman.

Int. 6. Did you have any book in which entries were made of work done in the shop?

Ans. Yes, sir.

Int. 7. Have you that book with you?

Ans. Yes, sir.

Int. 8. Who usually made the entries in that book?

Ans. I did.

Int. 9. Will you examine the article now handed you, and called in this deposition the "yielding frame," and state whether you ever saw an article like it; and, if so, when you first saw it and under what circumstances?

Ans. Yes, sir; I've seen the article on Dec. 3, 1877. Mr. Wade brought it into the shop to have these grooves cut. He brought it in to have these grooves cut merely, and did it.

Int. 10. State whether at any time afterward you made a similar article; and, if so, when.

Ans. I made three shortly afterwards, on Dec. 15, 1877—that is, I cut the slots in them.

Int. 11. Whether the shop of A. Leavitt & Co. and Hough & Rumney was a large or small one, and whether they employed few or many men in it?

Ans. It was a small shop, and they employed a few men—seven or eight.

Int. 12. Whether in 1876, up to November, when, as you say, Mr. Leavitt withdrew, you personally had knowledge of the work being performed in the shop?

Ans. I have knowledge of what work was performed in the shop at that time.

Int. 13. Had any article of the kind you made as stated been made in the shop prior to the first one you mentioned as made by you?

142 Ans. It had not while I was there.

Int. 14. Will you state when you began employment with A. Leavitt & Co.?

Ans. When he first started his business, prior to 1876—1875, I think.

Int. 15. Will you turn in your memorandum book to Oct. 11, 1877, and see if anything is charged to the Boston Button Company; and, if so, what as work done in the shop?

Ans. I have a charge here of forty-one and a half hours' labor on levers, set screws, wire, and steel.

Int. 16. Will you examine that article marked "Exhibit Z" and state whether the levers charged were liked the exhibit shown you?

Ans. They were like it.

Int. 17. Will you turn to the date of Jan. 4, 1878, and see if you made any charge against the Boston Button Company; and, if so, for what?

Ans. On Jan. 4, Boston Button Company, three covering plates.

Int. 18. Have you any recollection or any memorandum charge for any covering plates made in your shop prior to the date last mentioned; and, if so, what do you recollect, or what does it show?

Ans. Yes, sir; there were two plates made there prior to that date. Those were made by Mr. Leavitt. The time I cannot recollect, but I find a charge of Oct. 25, 1877, of one hundred and eleven and a half hours on plates, steel for slides.

Int. 19. Are you sure that the two plates which you recollect were made by Mr. Leavitt were feeding or covering plates, or were what we call here filling-in plates?

Ans. They were the same as we call feeding or covering plates.

Cross-examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Cross-int. 20. What is this book that you have in your hands and have referred to in your examination?

Ans. It is a book that I made my charges in of work done at the shop.

Cross-int. 21. What period of time does it cover; when does it begin and when does it end?

143 Ans. It begins in November, 1876, and ends July, 1878.

Cross-int. 22. Were the entries in it all made by you?

Ans. Yes, sir.

Cross-int. 23. When did Mr. Leavitt leave the concern, did you say?

Ans. On Nov. 1, 1876.

Cross-int. 24. Are you still in the service of the concern?

Ans. No, sir.

Cross-int. 25. When did you leave?

Ans. About 1880, in the spring.

Cross-int. 26. During the period that you made these entries in the book do they show all the work that was done in the shop from November, 1876, to July, 1878?

Ans. Yes, sir.

Cross-int. 27. That book that you have was the first entry of work done in the shop, was it not?

Ans. This was the first book after Leavitt went away.

Cross-int. 28. You was there with Leavitt, was you not?

Ans. Yes, sir.

Cross-int. 29. Mr. Leavitt was a partner, was he not, or proprietor?

Ans. I think he was a partner.

Cross-int. 30. This book that you referred to makes no mention of work done in the shop before November, 1876, does it?

Ans. Not by me.

Cross-int. 31. Was there not a memorandum kept by somebody of work prior to November, 1876?

Ans. Yes, sir.

Cross-int. 32. By whom was that book kept?

Ans. A. Leavitt.

Cross-int. 33. Did that book, as far as you know, cover and embrace the work done in the shop the same as yours?

Ans. Yes, sir.

Cross-int. 31. From these memorandum books the work is carried and charged in other books, is it not?

Ans. Yes, sir.

Cross-int. 35. I see by your memorandums in your books
144 that you charge so many hours' work, etc. Can you always tell what it is that is made by the memorandum that you make?

Ans. They have names for almost all pieces.

Cross-int. 36. What do you mean by "covering plates?"

Ans. It is a plate also termed in this examination a "feeding plate."

Cross-int. 37. When did you cease to work by the hour and become foreman of the concern?

Ans. The first Monday of November, 1876.

Cross-int. 38. Then this book covers the period while you were foreman, does it not?

Ans. It does, as far as it goes.

Cross-int. 39. Might not Mr. Leavitt, or some of the men, have put slots into a piece of metal like this you mention without your knowledge?

Ans. I think not, as Mr. Leavitt always left me in charge when he went out, and he was out a great deal.

Cross-int. 40. Before November, 1876, did you keep any accurate account of work done in the shop?

Ans. I did not.

Cross-int. 41. And you were working by the hour, were you not, before that?

Ans. Yes, sir.

Cross-int. 42. Would not Mr. Leavitt's knowledge of work done in the shop, if he kept account of it, of work done before November, 1876, as a partner, be more reliable than your own, who worked by the hour?

Ans. I think it would.

Cross-int. 43. Have you any entry in that book of a yielding block frame made for or charged to the Boston Button Company?

Ans. I have not; what I have is a charge of one hour's work on what is called here a yielding block frame.

Cross-int. 44. What enables you to say and to swear that that hour's work was bestowed upon that yielding block frame?

Ans. Because I have no other such charge on the book for milling. Mr. Wade was present while I did the job and waited for it.

Cross-int. 45. When was this?

145 Ans. On Dec. 15, 1877. I am mistaken, it was Dec. 3, 1877.

Cross-int. 46. Will you please give the exact entry in your book relating to this hour's work and all of it?

Ans. "The Boston Button Company, one hour's milling."

Cross-int. 47. Now, is there anything in that entry that enables you or would enable anybody to state that that work was bestowed on that yielding block frame?

Ans. There is no special mark here in the entry to show the kind of work done.

Cross-int. 48. You have seen Mr. Wade and talked with him about this matter before coming here, have you not?

Ans. Yes, sir.

Cross-int. 49. When, since that entry was made on Dec. 3, 1877, was your attention called again to this subject?

Ans. About two years ago.

Cross-int. 50. Do you know how these plates were charged to the Boston Button Company, whether by the day or by contract?

Ans. Part were charged by the day and part by contract. Those made by Mr. Leavitt by the hour.

Cross-int. 51. What enables you to say that there were two covering plates made by Mr. Leavitt?

Ans. I have seen the charge on the books.

Cross-int. 52. Have you any other knowledge or recollection than that, or is it that which guides you?

Ans. I saw the work being done.

Cross-int. 53. How do you fix upon two?

Ans. Nothing more than that I saw the two plates. They were the first done there. They were partly done when they came.

Cross-int. 54. Do you mean to say that there could not have been more than two made before November, 1876, without your knowledge while you were at work by the hour?

Ans. No, sir; there could not.

146 Direct examination resumed:

Int. 55. Do you recollect anything being said between you and Mr. Wade as to the way of making that charge of Dec. 3, 1877? And, if so, state it.

(Objected to as irrelevant, incompetent, and inadmissible.)

Ans. Yes, sir; I do. I asked Mr. Wade what it should be called in the charge. He said it was an experiment, and he should have some more made in a few days if it worked right; that's all.

Int. 56. Did you in fact and does the book produced show that names were used for work so far as the same had names or could be specifically designated?

(Objected to for same reasons as last question.)

Ans. Yes, sir; it does.

RUFUS P. GRAY.

Attest: WINSLOW WARREN,
Special Examiner.

Deposition of James S. Newell.

BOSTON, *Nov.* 13, 1882.

Direct-examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Int. 1. State your name, age, residence, and occupation.

Ans. James S. Newell; fifty-nine; Newton Centre, Mass.; carry on a machine shop.

Int. 2. What was the name of your concern, and where did it carry on business in 1876 and 1877?

Ans. James S. Newell & Co., 71 Lincoln street, Boston.

Int. 3. State whether your concern altered over or made changes in a certain number of machines for the Boston Button Company; and, if so, how many and when, in the course of those years.

Ans. I did make such changes; the number I can only tell by reference to the books.

Int. 4. My question refers to what are called covering machines, and will you look at your books and give the date of their being delivered to the Boston Button Company?

147 Ans. On June 21, 1877, I find a charge of repairs made on three covering machines. On Aug. 27, 1877, I find a charge of repairing five covering machines. On April 27, 1877, I have an entry of repairing a covering machine. On May 18, 1877, also an entry of charge of repairing a second covering machine.

Int. 5. If, in fact, you repaired twelve of those covering machines were the other two not accounted for by you delivered after Aug. 27, 1877, or before April 27, 1877, or can you fix the date?

(Objected to as leading.)

Ans. I cannot fix the date.

Int. 6. Do your books show any delivery prior to April 27, 1877?

Ans. I can only tell by examination.

Int. 7. Will you examine your books and answer the question?

Ans. I will. I find none delivered before April 27, 1877.

Int. 8. Will you turn to your books of Feb. 6, 1877, and see if you find a charge to the Boston Button Company for levers or spring holders?

Ans. I find an entry of twenty-four spring holders completed Feb. 2, 1877, twelve of which were placed on machines which we made by contract — twelve of which were charged to the Boston Button Company on Feb. 6, 1877.

Int. 9. Are we to understand that you made and delivered on this date of Feb. 2, 1877, twenty-four levers or spring holders?

Ans. No, sir.

Int. 10. How many did you make and deliver at that time?

Ans. We completed twenty-four, twelve of which were placed on the machines which we made by contract and twelve of which were charged to the Boston Button Company on Feb. 6, 1877.

Int. 11. Do you mean to say that the levers or spring holders that

you put onto the twelve machines that had been made by contract, as you say, were the same as those you completed and delivered at this date of Feb. 2, 1877?

Ans. I do.

Int. 12. Do you mean to say that the whole twenty-four spring holders that you made first and last for the Boston Button Company were of the same kind or character, or did you make twelve
148 of one kind under your contract and then make twenty-four of another kind, twelve of which were substituted for the first twelve?

Ans. I mean to say that the twenty-four spring holders referred to were all alike, and twelve of them were used upon the machines we had made or were making, and when made twelve were delivered to the Boston Button Company.

Int. 13. Will you say that the twelve spring holders made for the first twelve machines delivered by you were the same in kind as the twenty-four now referred to?

Ans. I cannot say.

Int. 14. If you had made twelve and charged for them under your contract price would you charge for twelve different ones without any allowance if the old ones were returned to you?

(Objected to as incompetent.)

Ans. I do not know.

Int. 15. If you made twenty-four and delivered them Feb. 2 why do you charge for only twelve?

Ans. Because twelve of them were used on machines made by contract, as stated.

Int. 16. If you had made and charged for twelve under your contract and they had been delivered why do you now make twenty-four?

Ans. I do not make them now. I charge for them now as completed. The labor was commenced in previous year on the twenty-four. They were carried forward as one lot. The final work on twelve was completed as they were needed; on the remaining twelve on this Feb. 2, 1877.

Int. 17. Are not your charges for twelve machines entered in full as you delivered the machines?

Ans. They are.

Cross-examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Cross-int. 18. Will your books show when your work was done on the new machines as well as the old you made for the Boston Button Company, and when finished and delivered?

149 Ans. They will show when finished and the delivery substantially.

Cross-int. 19. Will you please to examine your books and tell us the number of new machines—button-covering machines—made by you for the Boston Button Company, and the dates when your work on them was done and completed?

Ans. I give the dates and numbers from my books. On Sept. 11, 1876, three new button machines; on Sept. 25, 1876, six; on Oct. 16, 1876, one; on Dec. 12, 1876, eleven; March 29, 1877, seven; on May 10, 1877, six.

Cross-int. 20. Whether or not you had a sample machine to work by in making the new machines?

Ans. My recollection is that we had.

JAMES S. NEWELL.

Attest: WINSLOW WARREN,
Special Examiner.

Second Deposition of William W. Wade.

BOSTON, *Oct.* 24, 1882.

Direct examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Int. 1. Mr. McCleery has testified that one of the large machines brought in from Medford had all the new and patented improvements on it, save the devices to prevent breakage; have you anything to say in reply to that statement?

Ans. I say he is entirely incorrect. In the first place, there was not the present locking arrangement on it. There was no feeding plate upon it, consequently no oscillating lever, even in its rigid form. There was no yielding block and frame upon it, because the three last named only work in conjunction with a feeding plate. There never was a feeding plate made for that size of machine until Jan. 3, 1878.

Int. 2. McCleery says that that machine went down to Newell & Co.'s to serve as a model or guide in the making of the thirty-four new machines; have you anything to reply?

150 Ans. He is mistaken about that, as in the other case. In the first place, it was not a model for the other machines. The thirty-four were not built like it, because it had not the parts upon it as he stated, and it never went to Newell's place at all, never left our place, the factory, at all.

Int. 3. McCleery says that the new improvements were put onto the twelve old machines prior to May, 1877; have you any reply?

Ans. He is entirely mistaken upon that point, as the old machines were not altered over and returned to our factory until after the twenty-seventh day of August, 1877, as shown by the books of the man that did the work.

Int. 4. McCleery says that the thirty-four new machines were all in use or operation before the old ones went to Newell & Co.'s for alteration; have you any reply?

Ans. I think he is entirely mistaken on that point, as I am reasonably certain they were not all in operation when I left. The first improvements were put upon the old machines after they were altered over, and not upon the new. There were no feeding plates put upon the new machines until after January, 1878. The first feeding plates for the new machines were delivered to us Jan. 3, 1878,

as appears by the books of the parties who built them, as they were built outside of our factory. A good many of them were in use for making buttons of various kinds.

Int. 5. Could the locking arrangement and the frame and yielding block arrangement be used without the feeding plates?

Ans. The locking arrangement could; the yielding block and frame and lever and spring could not.

Int. 6. McCleery says that the thirty-four new machines were ready to have the new improvements put on them as soon as they came in from Newell & Co.'s; have you any reply?

Ans. He is entirely mistaken about that, because Newell & Co. only made a part of each machine. A part of each machine was made at another place. When made were brought to our place, the body part from Newell's and the other parts from the other maker, and had to be fitted together in our factory before the improvements could have been put on.

Int. 7. State what parts were made in another factory.

151 Ans. The feeding plate, the standards for receiving the die; what is called the shells, for holding the set edge; the filling-in plate; what we term the saucer, which holds the filling-in-plate; and what we term the arbors, with their connections necessary to hold what we call the heads and stems in their proper place to receive the canvas which forms the eye of the button; the taking arrangement was made by the same parties, and the frame that holds the yielding block.

Int. 8. McCleery says that he did not know that you had applied for this patent until about the time the letters issued; have you any reply?

Ans. He is entirely mistaken about that, because I brought the model into the office, showed it to him before it was sent to Washington. I also drew the specifications and claim there in the office. I do not know that he saw them, but I had the model there. I can't remember of any talk with him.

Int. 9. Do you remember any conversation with him prior to the issuing of the letters?

Ans. I do not remember any sufficient to repeat it; I know there was more or less conversation upon the point.

Int. 10. Did he say anything to you about Mr. Metcalf's going to Washington prior to the issue?

Ans. He did not; there was a conversation with my son which I did not hear.

Int. 11. He says, and Mr. Metcalf has also testified as to the same point, that your salary was fixed and your duties marked out or assigned by them or the company; have you anything in reply?

Ans. The term "fixed" is not proper. My duties certainly could not be assigned, because my duties embraced the entire range of the manufacturing establishment; our salaries were agreed.

Int. 12. McCleery says that he knew all about this machinery and these improvements all the time from prior to 1875; have you any reply?

Ans. I know he did not; he knew nothing about them for the

simple reason he could not know other than what I told him; he had no mechanical experience, and did not know one machine from the other until he was told.

152 Int. 13. He says that you broke prices of covered buttons, and that he did not until after you had, in substance; have you any reply?

Ans. I have no idea that I ever did. More than one or more than half a dozen of our former customers came to me, stating at what price they had offered their goods. I found myself obliged to meet the market, as I could not expect with two machines to control it, and I reduced my prices accordingly. I have upon my books to-day half a dozen customers who say they are paying me more than the price of the button company. I say, "Go there for your goods; I can't do it." Among that number is the party that has been referred to, George S. Harrington.

Int. 14. Did you first break the prices in buttons?

Ans. I did not lower my price at all until I was, as I supposed, credibly informed of their offers and their sales.

Int. 15. Have you made buttons below the price at which you were thus informed they offered them?

Ans. I never have.

Int. 16. How soon did you begin to manufacture and with how many machines, after the dissolution?

Ans. I couldn't tell the exact date without reference to the books; not more than a year or a year and a half ago; begun with one; have run only five at one time, and that only recently.

Int. 17. Henry D. Stone has testified that he, as foreman for Newell & Co., made the jointed or flexible lever arrangement called by him spring holders; have you any reply?

Ans. He is entirely mistaken in relation to that; the flexible lever or spring holder was not made, even as experiment, until August or September, 1877; it was made by myself, and I put it on and adjusted it, worked it for a time, and then became satisfied it was the best thing yet made, and ordered some more from Hough & Rumney. They were built and delivered to us on Oct. 11, 1877, as shown by their books.

Int. 18. If Stone made anything of or for this lever arrangement, what did he make?

Ans. He made at first a lever which was designed to hold what we term a curved spring. They were made in the contract for the machine; he made, I think, a dozen. I should think it was

153 before we put any on the machines. My son said a straight spring would cost less money, which was true. We found, on applying the straight spring, that the angle on the lever, as shown in Exhibit X, would not permit a straight spring. I then took the pattern from which the castings were made, changed the angle to its proper position, took it down to Mr. Newell's and had some other castings made. With that change that would receive a straight spring he made me twenty-four of those; he only charged for twelve, because we returned to him the set screw and roller in the end of the lever, which was rather more than one-half of the

cost of the entire lever, and we were credited with this, as appears by their books.

Int. 19. Was this an extra charge by them and does it so appear on their books?

Ans. It was and does.

Int. 20. And did Stone or Newell & Co. ever make the present flexible lever with springs as now used or any of them?

Ans. I cannot now recall that they ever did.

Int. 21. If they ever did after what time was it?

Ans. It must have been after October, 1877, for the reason that there were none of those things ever made except by my direction. Hough & Rumney made the first ones, as I recollect it.

Int. 22. Exhibit Z was shown to Mr. Stone and he said that he made it or some of them for the thirty-four new machines after the first ten or twelve had been delivered to the factory. Will that exhibit, being the actual lever now in use, go onto one of the machines as made by Newell & Co.?

Ans. The ones made by Hough & Rumney would not go on there, and I am sure there never was one made that would, because the hole in the lever was smaller than the arbor and the arbor had to be turned down to receive the lever. I am certain there were never any made that would go on without.

Int. 23. If Newell & Co. had made them for the new machines, as Stone testified, would they not have gone onto them?

Ans. There is no reason why they should not. The only reason for those that were made not going on was because the tools in different shops do not agree. They have no standard, except
154 in screws or something of that kind. The reamer with which this hole was made, the next above it, at Hough & Rumney's, was too large, and I had him use that because we could readily adapt the arbor to it.

Int. 24. Can the state or progress of your invention be determined by the kinds of buttons made, as testified to by McCleery? And, if not, state why.

Ans. It cannot. They give no indication of the progress of this invention other than between my old machine and my new—that is, only in a single instance or substantially so. Every style or shape of button that can be made now I have made upon the old foot machine before this invention was made. This invention relates entirely to the saving of stock and labor and the facilitating production. If there had been a new button I should have patented the product.

Int. 25. Starting with the patent of 1869 and the buttons made on that machine, can the changes from it or the production of buttons be used as marking the various stages of your new invention?

Ans. They could not in any way.

Int. 26. Some of respondents' witnesses have testified that the first new machines were made from or by the aid of drawings. Is that so, and have you those drawings, and will you put them into the case for anybody's use or reference?

Ans. I will say that there were some drawings made for the pur-

pose of aiding the workmen. I have those drawings and will put them in.

Int. 27. Do those drawings in any way show or call for the locking arrangement or the device for preventing breakage in any form or character?

Ans. They do not.

Int. 28. In 1876, 1877, and 1878 was your factory open to the public; and, if so, how far?

Ans. It was not open to the public at all.

Int. 29. Up to the time or about the time of your application for this patent will you state who, if anybody, had any knowledge of these late inventions?

Ans. My partners; my son George, who was in charge of
155 these machines, and the man that assisted me in the soliciting of these patents. If anybody else, they were such persons as the partners chose to let pass into the factory. Some of the workmen and another son of mine had some knowledge of them. That's all.

Int. 30. Has any person ever had or used one of these improvements except yourself and under your personal supervision up to the time the patent issued?

Ans. Not to my knowledge, save as has been testified in my firm of the Boston Button Company.

Int. 31. Witness Edward N. Lord testified that he put on the jointed levers within three or four months of September, 1876. Have you any reply to his statement?

Ans. He is entirely mistaken, because there were none made until some time—I should say about August, 1877, when I made the experiment. I made the lever myself and put it on myself. This first one was not quite right. When I became satisfied that this was the best thing so far I ordered some of Hough & Rumney. They were made and delivered to us Oct. 11, 1877. These were the first perfect ones that were put on.

Int. 32. What, if anything, did Lord put on?

Ans. If he ever put on anything it was the levers prepared for a straight spring by Newell. I do not think he put on any of those. I should say his experience would not permit of his doing it.

Int. 33. Lord says that he put on frame and yielding blocks within three or four months of September, 1876. Have you any reply?

Ans. He could not have done it, because it was not made until Dec. 3, 1877; that I made part of it and put it on myself and set it to work, as he could not have done that. His skill was not sufficient.

Int. 34. When were any others made, and by whom?

Ans. There were some more made on the 15th of the same month by Hough & Rumney—that is, the frame—as appears by their books.

Int. 35. To which class of machines were these last devices you have mentioned put on?

Ans. They were put onto the old machines after they were altered over.

156 Int. 36. Why?

Ans. I know not; because the old machines had no place for them and no use for them—nothing to co-operate with them.

Int. 37. When were feeding plates put onto new machines?

Ans. They were not put on until after Jan. 3, 1878. They were delivered to us that day, as appears by the books of the party who made them.

Int. 38. Can either the locking arrangement or the device to prevent breakage be used without feeding plates?

Ans. The locking device can and the other cannot.

Int. 39. The new machines were used for making various kinds of buttons, were they not, without feeding plates, and for what buttons or kinds of buttons were the feeding plates and these last-named devices used with them required?

Ans. They were. These last designed were for making buttons with a cloth back—either canvas, linen, or other material—and only those kinds.

Int. 40. Andrew J. Leavitt testified that he made the frame and yielding block between February, 1876, when the company moved into Boston, and November, 1876, when he left the concern afterwards known as Hough & Rumney. Have you any reply to that statement?

Ans. I know he was entirely mistaken, because even the drawings for the new machines were not made until June, and they were not delivered until long after—after Leavitt left—and the old machines were not delivered to us until Aug. 27, 1877. It was my province to order those things, and I know I never ordered him to make them. No one else could have ordered them, and I should have known it if they had.

Int. 41. Do you know what individual did make that frame and yielding block?

Ans. I know who milled out the frames—Rufus Gray, Dec. 3, 1877.

Int. 42. Was that the first one ever milled or made?

Ans. It was. I know it to be, because I took it into my own hands, went and stood by and saw it done, dictated the length and width of the slot, stayed until it was done, and took it and carried
157 it back to the factory. I then took it and fitted it to the machine and put it into operation myself.

Int. 43. Were the eight machines testified by Mr. Metcalf as having been bought of the American Button Company covered by any patent?

Ans. I think there were not but six, and they were not covered by any patent.

Int. 44. How soon after these were bought did you get any patent, and what did it cover?

Ans. My recollection is the patent was dated March, 1869; that's when they were issued. The patent was on the old machines; it covered the old machines with the alterations made on them.

Int. 45. Who made the old machines that the button company bought?

Ans. They were made for me.

Int. 46. Mr. Metcalf testified that he did not know of your application for a patent until about the time you advertised a dissolution, of July, 1880? Have you any reply?

Ans. I can only say it was talked about a great deal, and offers had been made and refused—offers to sell or to buy, to put in the new patent the same as the old; he knew about it. I made an offer to him to sell the patent before the patent issued. One circumstance I remember: Before I advertised he sent Mr. F. M. Holmes to me, asking me if I wouldn't make a stock company of the concern. Mr. Holmes came to our office in Boston. I told him I would do so, and on the following day, at nine o'clock, I would give him a paper setting forth the terms. I think I did not give him the paper, but stated that I would make a stock company on condition I should own one-half; that the patents, both his interest and mine, should represent one-quarter of the capital.

Int. 47. How early did you begin to demand a dissolution, and for what reasons?

Ans. I couldn't fix very definitely when I began to demand it. I should think not far from the time I made the application. It was wholly because the patents were not recognized—that is, my rights in them were not recognized.

158 Int. 48. Did you ever urge as grounds for dissolution what Mr. Metcalf has testified as a ground—that your partners were not willing to allow you general management of the business?

Ans. I never did.

(Adjourned.)

Nov. 14, 1882.

Cross-examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Cross-int. 49. When you moved to Boston from Medford you brought with you twelve old machines and one or two new ones, and afterwards some thirty-four new machines were made in Boston. Were the new devices put upon the old machines first, before the new machines were made, or were the new machines made and the devices put upon the old machines afterwards?

Ans. Certain devices were put onto the new machines first; certain other devices were put upon the old machines after they were altered over. What I mean is, some were put first upon the new machines after they were built and some were put first upon the old machines after they were altered.

Cross-int. 50. Did the old machines go for alteration all at once or one at a time?

Ans. My recollections are that the old machines went for alteration—about three first, then three or four more, and then the balance; they went down three times.

Cross-int. 51. Was it not true that twenty-eight new machines were made and brought in before any alteration of the old ones?

Ans. I should say not so many as that. My recollections are that as soon as we got the new machines and got some few of them at

work I sent down two or three of the old machines to be altered over by the day to determine the price for which they could all be altered.

Cross-int. 52. Have you any means now to enable you to state truly how many new machines were made and brought in before any of the old ones were altered?

Ans. I have the means of knowing that they were not more than twenty-six. My recollection would be that there was less than
159 that. Why I say not more than twenty-six is because the alteration of the old machines embraced one new piston to each machine. When the pistons for the last twelve new machines were forged there were twelve extra pistons forged by Mr. Newell with which to repair the twelve old ones. Those twelve extra pistons forged to repair the old ones were forged an inch too long, that being the length of the new pistons; they were all the same every way except the length, the old and the new. Having forged the twelve old ones too long, they did not discover, in finishing, the mistake in the forging and finished them all for the new machines. They discovered it afterwards and asked me to pay for it, but, as it was their mistake, I refused to pay for it. I guaranteed all mistakes upon the new machines but none upon the old, as they were done by the day.

Cross-int. 53. When these old machines were sent out to be altered over had any of these old machines any of the patented improvements on?

Ans. They had.

Cross-int. 54. Can you state what ones—what of the improvements?

Ans. They had the lifting or sleeve-stripping device—some of them, I don't know but all, and one or two, don't know but three—one, certain, had feeding plates on—in their first and original condition.

Cross-int. 55. Had any of these old machines, before they were sent to be altered over, any other of the new patented improvements?

Ans. I can't think that they had. They were sent down there to be provided with the new improvements. They would not have been sent there to have had the feeding plates put on; they were never put on outside of our establishment, I would add, together with their co-operative or operating mechanism.

Cross-int. 56. You spoke in your examination heretofore of a model to be sent to Washington. Where was that model made and who made it?

Ans. A part of it was made by James S. Newell, at his shop in Boston; a part was made by Warren S. Hill, a model maker, 50 Sudbury street then, and a part of it was made by myself, at 11 Chardon street, Boston.

160 Cross-int. 57. You have said that that model was at some time at the shop of the Boston Button Company. What was it there for?

Ans. I had it there for the purpose of drawing specifications for the Patent Office, as I drew them first myself.

Cross-int. 58. Where did you draw—in what part of the shop—those specifications?

Ans. I drew them at my desk, in the office.

Cross-int. 59. Where was your desk?

Ans. It was in the office of the company, where the books were kept—the only office the company had.

Cross-int. 60. Do you mean to say that you drew the specifications to be used at Washington for your patent?

Ans. I mean to say I drew the first draft, and then, in connection with Mr. Warren S. Hill, I made another draft—that is, he and I together made the final draft for Washington.

Cross-int. 61. Where did you and he prepare together the final specifications?

Ans. Prepared them at his house, in Hyde Park.

Cross-int. 62. Did you have the model with you then?

Ans. No, sir; I had no occasion for the model, as nothing but the phraseology was changed.

Cross-int. 63. Did Mr. Hill have a place of business in Boston?

Ans. He did; a small machine shop, No. 50 Sudbury street.

Cross-int. 64. That's where a model was partly made, was it not?

Ans. It was.

Cross-int. 65. Did you have any other patent solicitor to aid you in obtaining your patent than Mr. Hill?

Ans. I did not. I would add I went to Washington myself and while there, at the suggestion of the examiner under whose charge the examination was made, he made some suggestions, which I adopted. With that exception, I had no other solicitor.

Cross-int. 66. Can you state now when that model was taken to the Boston Button Company or when it was taken away?

Ans. I cannot fix the date.

Cross-int. 67. Can you tell how long it was there?

161 Ans. I didn't leave it there over night. I couldn't tell how long it was there. I took it away nights.

Cross-int. 68. I think you have given the purpose for which the model was carried there. How long did it take you to draw your specifications?

Ans. I couldn't say; it might have been two or three days. I don't mean two or three days employed, but it might have taken me that time.

Cross-int. 69. You have said that Mr. McCleery, you think, must have known that you were applying for a patent, because you drew your specifications there at the office of the company and because you took this model there. Does that follow?

Ans. I think my testimony is not exactly like that. I will say, whatever my testimony was then, I know that he knew long before the letters were issued; so also did Mr. Metcalf, as I think I have testified before. In conversation with Mr. Metcalf upon that subject Mr. Metcalf told me to my face that I should not have those patents. That must have been before I obtained them. I know that Mr. Met-

calf went to Washington, and Mr. McCleery [told my son I could not get those patents, because he had gone to Washington].

(Part in brackets objected to by respondent as stating conversation between other parties.)

One other circumstance I will relate: Mr. Metcalf made a proposition to me through a friend of his to make a stock company and put in the patents, the old ones and the new ones, when they came out. I agreed to do it on condition that I should own one-half. Mr. McCleery wa knowing to that. The friend he employed was Mr. F. M. Holmes. The stock company was not formed, because I would not let them have more than half—in other words, a controlling interest. Mr. McCleery was a partner and knew all about it.

Cross-int. 70. Have you any means of fixing the time when Mr. Holmes came to you?

Ans. Not definitely. I know it was before I left the company—before July, 1880.

Cross-int. 71. You have stated that your duties in the Boston Button Company covered the entire range of the manufacturing
162 department. Did the concern ever give notes, in the way of business, for merchandise or money?

Ans. I do not know; I presume so. I think I did not say I had anything to do with the purchasing or selling, unless it was for the mechanical department, or something like that. I will say that no arrangement of any kind was ever entered into as to who should give notes, purchase goods, or draw checks, or anything of the kind. My name stood at the Hamilton Bank, the same as the other partners', with all the rights of the other partners, and was never withdrawn.

Cross-int. 72. Did you buy goods of any kind for the Boston Button Company?

Ans. I did.

Cross-int. 73. What goods did you buy for the Boston Button Company?

Ans. I bought lastings, I ordered paper, I ordered iron, I bought supplies.

Cross-int. 74. Of whom?

Ans. I bought them of different parties. I bought lasting of Flanders or Landers, of Lynn, and bought lasting in Haverhill of a dozen parties. I can't call their names. It was my business to buy the lasting, paper, iron, and general supplies that came in there.

Cross-int. 75. Do you mean that you actually bought them of the parties or that you gave orders to others in the concern of what was wanted?

Ans. I mean both ways. It was my business to see and inspect everything, where it could be seen and inspected. I bought the shafting, pulleys, hanging, etc., belonging to the shop. The bills went to the office and were paid.

Cross-int. 76. What materials are used in the manufacture of a button?

Ans. Iron, paper, linen cloth, cotton cloth, silk, and jute and com-

binations of all, and all sorts of cloths—probably a hundred different materials.

Cross-int. 77. Who purchased those?

Ans. Some I went out and bought and some I ordered at the office—ordered of the clerk or McCleery—and then went and bought them or ordered them from abroad, as the case might be.

163 Cross-int. 78. Can you give the names of any party of whom you bought the goods which you have enumerated as used by the Boston Button Company?

Ans. I think I bought of Flanders or Landers, of Lynn; of C. C. Robbins, of New York; of Phelps, Dodge & Co., New York. I think it is W. C. Smith, of Connecticut, now William Foulds & Co. I don't recall others now, but it was my practice to purchase steel in Boston of various parties, such as Jessup, Sanderson, Park Brothers and others. I recall others; I think it was Schwietering. I bought goods in New York—silk and lasting. When McCleery first came into the business he knew nothing about it whatever. For the first year or two everything was done by me or us together. I went to New York with him to buy goods. After he got used to it, it was left to him, not by agreement, but by courtesy.

Cross-int. 79. When did you go to New York with him? Was it before or after you came to Boston?

Ans. My recollections are that I went expressly for that purpose before we went to Boston but after he became a partner in the concern.

Cross-int. 80. Do you mean to say that after you came to Boston to the time of the dissolution you were buying all these goods you speak of for the Boston Button Company?

Ans. I mean to say I began before and continued clear through the existence of the Boston Button Company up to its dissolution. After we got into the market and became well known we were solicited to buy goods by sample, such as silks, satins, and others. These samples were brought or sometimes sent by these parties for us to select from, and I mean to say I usually had as much to say in the purchase of these goods as anybody else. McCleery and myself usually agreed on what we would order. Mr. Metcalf had nothing to do with it—that is, I don't recollect that he had.

Cross-int. 81. What goods did you say you bought of Flanders?

Ans. I said lastings, I think.

Cross-int. 82. Who hired the help of the Boston Button Company during the partnership of Metcalf, McCleery & Wade?

Ans. That belonged to my department; was my duty, or I assumed it as a duty for a period of time; don't know how long.

164 I hired the foreman of each department, and then we agreed tacitly to allow the foreman of each room to hire his own help.

Cross-int. 83. Who paid the help?

Ans. The Boston Button Company. I believe it was the business of the book-keeper.

Cross-int. 84. Did you pay them?

Ans. I did sometimes, until we came into Boston.

Cross-int. 85. Do you know after you came into Boston who paid the help? If so, please state.

Ans. The man's name was McBriar, though I think John D. Ellis paid some. I mean McBriar handed the money through the window as they passed up.

Cross-int. 86. Who was McBriar?

Ans. He was a book-keeper.

Cross-int. 87. Was Ellis a book-keeper?

Ans. He was; prior to McBriar.

Cross-int. 88. After you came to Boston to the dissolution did you ever sign a note of the Boston Button Company?

Ans. I don't think I ever signed one at all.

Cross-int. 89. After you came to Boston, until the dissolution, did you sign checks?

Ans. I cannot tell when I ceased to sign checks. I should say yes, I did, after we came to Boston. I swear that I did to the best of my recollection.

Cross-int. 90. For what length of time after you came to Boston did you sign checks?

Ans. I couldn't tell.

Cross-int. 91. Did you ever cease to sign checks for that firm during its existence?

Ans. I might say I never did.

Cross-int. 92. Have you any recollection how many checks you ever signed during the existence of that firm?

Ans. I have not.

Cross-int. 93. Can you tell whether you signed one or five or fifty?

Ans. I signed more than one or five, but whether more than fifty am not willing to say; am not willing to say what number.

165 Cross-int. 94. Have you now any recollection of any occasion when you signed a check?

Ans. No definite one.

Cross-int. 95. Have you any?

Ans. I cannot fix any date.

Cross-int. 96. Can you fix any person to whom you gave a check or for what purpose you drew it?

Ans. I don't recall anything definite in relation to it.

Cross-int. 97. You have given the name of George S. Harrington in connection with the matter of purchasing buttons. Do you remember it?

Ans. I do.

Cross-int. 98. You stated that there were half a dozen others in the same connection who purchased goods of you and were paying more than the Boston Button Company were charging. Do you remember that?

Ans. Not just in that way.

Cross-int. 99. What did you say?

Ans. I said that I was charging them more than the Boston Button Company had offered to do them for, as they reported to me or to my partner.

Cross-int. 100. You have answered as follows: "I have upon my books to-day half a dozen customers who say they are paying me more than the price of the Button Company. I say, 'Go there for your goods; I can't do it.' Among that number is * * * George S. Harrington." Now, who are those others besides George S. Harrington?

Ans. I will give those from my books, or, if I can, from recollection: A. H. Davenport, successor to Brabrook & Co. I think there were two parties on Tremont street—can't recall their names—towards Boylston street. I know it was a common practice for those men to come into my place for goods. I can't give more names from recollection, but will give the names from my books.

(Witness subsequently examined his books and gave the following names: Lawrence, Wilde & Co., Leach, Annable & Co., H. A. Turner & Co., Bancroft & Dyer, and J. S. Paine.)

166 Cross-int. 101. Who made the sale to George S. Harrington that you refer to?

Ans. I don't refer to one sale, I refer to general sales. Goods were sent to me to be made up—that is, the cover of the button, which is a common practice—and he told me, as also my partner, that the Boston Button Company would make them for twelve cents. I never charged less than fifteen, and did make and deliver quantities to him at that price.

Cross-int. 102. Who made the first sale to George S. Harrington of lasting buttons?

Ans. I couldn't tell without referring to books, and don't know as I could then.

Cross-int. 103. Who could have sold them to him?

Ans. Henry T. Champney or my son.

Cross-int. 104. But which you don't know?

Ans. I do not; I can tell by looking at the books, any particular sale, by the handwriting.

Cross-int. 105. Did you yourself have any talk with George S. Harrington about the price?

Ans. I have no doubt I did.

Cross-int. 106. Have you any recollection that you did?

Ans. I am very sure that I have talked with him a good many times about prices. I have been to his place and he to mine a good many times to talk about buttons.

Cross-int. 107. Have you or not said, and is it or not true, that all the kinds of buttons now made can be made, or could be made, on the old foot machine?

Ans. I think I said they had been made; that I had made them myself; it is true they can be made.

Cross-int. 108. Can you make the thick-edged button, without the stripping device, on the old machines?

Ans. Show me the button and I will tell you.

Cross-int. 109. Have you or not said in your examination that there were some kinds of buttons that could not be made without the stripping device?

Ans. I have; I will say a button may be a thick-edged button and be a round edge; a button may be a thick-edged button
167 and be a square edge; the square-edged cannot be made. I do not mean by that that it cannot be made by turning the machine by hand and picking it out; I mean, as a practical working machine, it will not do that.

Cross-int. 110. When you were in the partnership and had charge of the mechanical department, after you came to Boston and to the time of the dissolution, whether or not you were accustomed at any time to have visitors, your friends or others, in the mechanical department?

Ans. I was, the same as the other partners. We allowed persons such as we considered safe to go through the concern, to go through, both my friends and the friends of my partners, such as my partners or myself chose to introduce, excluding all such as we thought it unsafe, in view of the patents and in view of the style of our manufactures, to exclude.

Cross-int. 111. Were such visitations frequent?

Ans. They were not.

Cross-int. 112. Do you remember to have refused anybody admission at any time?

Ans. I have just said I excluded everybody that we had any reason to fear.

(Question repeated. Witness answers:)

No, I cannot name any particular person at this time. As that was our rule, I followed the rule.

Cross-int. 113. Do you recollect now that you ever did exclude any man that applied for admission; and, if so, who was it?

Ans. I can't recollect the time when I excluded people. I know I have.

(Question repeated.)

The great bulk of people that came for admission—when I knew a man and knew his name I might or might not have excluded —.

(Question again repeated.)

I couldn't call the name now of any.

Cross-int. 114. Do you remember of taking a Mr. Harriman, or that he visited the shop?

Ans. I do; he was one of our employés; knew all about our business; had been employed by us; had no interest in any other button company except to receive his dividends.

Cross-int. 115. Did he or not have at all times access to the factory?

168 Ans. I never knew of his coming into the factory except going to the office, and from there he would go into the factory. I never excluded him and I am sure my partners never did.

Cross-int. 116. Do you know a Mr. Colton, superintendent of another button concern?

Ans. I do.

Cross-int. 117. Did you or not take him through the factory?

Ans. I did; a Mr. Josiah Colton, one of my old employés in the button business—a superintendent of a concern in which I was a partner for six years or more at Longmeadow, Mass., near Springfield. This was done out of courtesy, in always taking me into their concern when I was in their vicinity.

Cross-int. 118. Do you know a Mr. Hayden, formerly in the button business?

Ans. I know two or three, formerly employés of mine, by the name of Hayden.

Cross-int. 119. Did you take all or any of them through your factory?

Ans. I presume I took them all; should not be willing positively to say I did, but never any of them while they were in the button business.

Cross-int. 120. Whether you took through the factory Mr. Burrows, formerly a partner or in business with you?

Ans. Mr. Thomas Burrows and myself started the Boston Button Company. Mr. Burrows had, I believe, at all times the passive right to go into the factory, both from me and my partners. He would come to the place, and if I was at work in my department he, like every one else, had to go to the office, and I would then come up to my room. If that was taking him through the factory I did it. I have no recollection of taking him through. He was a privileged character, I might say.

W. W. WADE.

Attest: WINSLOW WARREN,
Special Examiner.

169 *Further Evidence for Defendants, Taken Pursuant to the Sixty-Seventh Rule of the Supreme Court of the United States, in Equity, as Amended, Before me, Winslow Warren, Special Examiner.*

Present: Baxter E. Perry, Esq., of counsel for complainant; Henry C. Hutchins, Esq., of counsel for defendants.

Deposition of William L. Taylor.

BOSTON, *Dec.* 2, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Please state your name, age, residence, and occupation.

Ans. William L. Taylor; thirty-one; Somerville, Mass.; packing and shipping clerk for the Boston Button Company.

Int. 2. When did you go into the service of the Boston Button Company?

Ans. In May, 1873.

Int. 3. Where was their factory at that time?

Ans. At Medford, Mass.

Int. 4. Since you came into Boston what has been your business in the Boston Button Company?

Ans. At first I went into the store, took charge of the orders, starting them through the factory, forwarding their completion, and looked after the shipping of the goods; took care of the stock of paper boxes, keeping up the supply, ordering when out; also the whole or piece stock and scrap stock for covers, attending to general store work, acting as assistant to Mr. McCleery, looking to him for instructions and referring all matters to him for which I did not want to take any responsibility myself; afterwards I took charge of the packing and shipping, and took charge of that department under Mr. McCleery's instructions.

Int. 5. What proportion of the goods purchased and used in the Boston Button Company were foreign goods?

170 Ans. For the piece stock for covers, they were nearly all foreign; scrap stock, domestic.

Int. 6. Who purchased or ordered these goods?

Ans. Mr. McCleery.

Int. 7. Any of these goods purchased by sample?

Ans. The greater part.

Int. 8. Who examined these samples and gave the orders?

Ans. Mr. McCleery and myself.

Int. 9. Now state, if you please, what goods or merchandise used by the Boston Button Company were purchased, if any, by Mr. Wade.

Ans. None that I know of. I am speaking of cover stock only.

Int. 10. Who hired and discharged the help in your department?

Ans. Since taking charge of the packing and shipping department I have discharged my own help. Some of them I have hired and some have been hired from the office.

Int. 11. Who paid the help?

Ans. They were paid from the office.

Int. 12. Did you ever know Mr. Wade to hire or to discharge or to pay any of the men in any of the departments?

Ans. He hired me when I first went there in May, 1873; other than that I do not know of any.

Int. 13. What proportion of your goods were purchased in New York?

Ans. The largest proportion.

Int. 14. And who purchased them?

Ans. Mr. McCleery.

Int. 15. Did you ever request Mr. Wade to make a purchase or consult with him in regard to it?

Ans. He might have bought something sometimes when going that way; at other times, I should say no.

Int. 16. Did you ever see a model of a button-covering machine in the office of the Boston Button Company which was sent to Washington?

Ans. No.

Int. 17. Could it have been in the office in office hours without your knowledge?

Ans. I think not, unless covered.

171 Int. 18. What did Mr. Wade do in the factory after you came to Boston?

Ans. He never done anything in my department. Other than that I could not say.

Int. 19. How much time did he spend daily in the counting-room?

Ans. A great deal of the time. Just how much I couldn't say.

Int. 20. What did he do in the counting-room?

Ans. Nothing, that I know of.

Int. 21. Please to state whether your wages were the same at all times, and, if changed, who changed them, after you came to Boston.

Ans. They were changed twice by Mr. McCleery.

(Cross-examination waived.)

WILLIAM L. TAYLOR.

Attest: WINSLOW WARREN,
Special Examiner.

Deposition of Thomas McBriar.

BOSTON, *Dec.* 2, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Please state your name, age, residence, and occupation.

Ans. Thomas McBriar; thirty-five; Boston, Mass.; book-keeper and cashier for the Boston Button Company.

Int. 2. When did you go into the service of the Boston Button Company?

Ans. June 30, 1877.

Int. 3. Who composed the firm at that time?

Ans. Henry B. Metcalf, Wm. McCleery, and Wm. W. Wade.

Int. 4. What were your duties?

Ans. Book-keeper and cashier.

Int. 5. Who signed the checks of the firm?

Ans. William McCleery.

Int. 6. Did you ever know Mr. Wade to sign a check?

Ans. No.

Int. 7. Who hired the help?

Ans. William McCleery.

Int. 8. Who fixed the wages of the help?

Ans. William McCleery.

172 Int. 9. Who discharged the help?

Ans. William McCleery.

Int. 10. Who paid the help?

Ans. I paid them.

Int. 11. Did Mr. Wade ever, to your knowledge, pay the help?

Ans. No.

Int. 12. Who bought the various materials purchased and used by the Boston Button Company, such as metals, paper, cloth, etc.

Ans. William McCleery.

Int. 13. Whether Mr. Wade ever, to your knowledge, purchased any.

Ans. Never.

Int. 14. Where was the bulk of the materials purchased used by the Boston Button Company?

Ans. New York.

Int. 15. Who purchased these goods in New York, if you know?

Ans. William McCleery.

Int. 16. Whether Mr. Wade, to your knowledge, ever went to New York to purchase goods.

Ans. Never.

Int. 17. Whether you ever saw the model of the button-covering machine in the office of the Boston Button Company said to have been sent to Washington.

Ans. I never did.

Int. 18. Whether it could have been there in office hours without your knowledge.

Ans. It could not.

Int. 19. Had Mr. Wade a desk in the counting-room?

Ans. He had.

Int. 20. What did he do in the counting-room?

Ans. Wrote essays, made poetry, and told stories.

Int. 21. How much of his time did Mr. Wade spend in the factory?

Ans. On an average, about two hours daily.

Int. 22. Was he accustomed to make buttons upon the machines, as other employés did?

Ans. No.

(Cross-examination waived.)

THOMAS McBRIAR.

Attest: WINSLOW WARREN,
Special Examiner.

173 *Deposition of Charles H. Haven.*

BOSTON, *Dec.* 2, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Please state your name, age, residence, and occupation.

Ans. Charles H. Haven; forty-seven; Boston, Mass.; superintendent of Boston Button Company.

Int. 2. How long have you been in the service of the Boston Button Company?

Ans. I went to work — October, 1876, and have been employed since that.

Int. 3. Who hired the help in your department?

Ans. Mr. McCleery.

Int. 4. Who fixed their wages?

Ans. Mr. McCleery.

Int. 5. Who discharged them?

Ans. Mr. McCleery.

Int. 6. Who managed the factory?

Ans. Mr. McCleery.

Int. 7. Who purchased the metal stock that you used in making the parts for buttons?

Ans. Mr. McCleery.

Int. 8. Who bought the supplies for the mechanical departments, such as steel, wire, oils, etc.?

Ans. I bought some myself; others I ordered at the office.

Int. 9. Has your salary been the same at all times?

Ans. It has not.

Int. 10. Who changed it or increased it?

Ans. Mr. McCleery.

Int. 11. Who hired you?

Ans. Mr. McCleery.

Int. 12. Do you know Mr. Edward N. Lord, who worked on button-covering machines for the Boston Button Company?

Ans. I do.

174 Int. 13. Whether he was a man of skill as a machinist, if you know.

Ans. He was.

Int. 14. Whether he had sufficient skill as a machinist to adjust the device known as the yielding-block spring and frame to the covering machine.

Ans. I think he had.

Int. 15. Whether he had sufficient mechanical skill and experience to attach and adjust the device known as the spring lever or spring holder to the covering machine.

Ans. I think he had.

Int. 16. In what part of the factory were you employed while superintendent?

Ans. I was employed in the part for manufacturing the metal parts for the button; also in the machinist department. While superintendent of a department, I was employed in the machinist department and in furnishing the metal parts for the buttons. While superintendent of the whole, I was employed also in the covering department.

Int. 17. When did you cease to be superintendent of a department and become general superintendent?

Ans. At the time that Mr. Wade's son left the employment of the company.

Cross-examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Cross-int. 18. When did George A. Wade leave the employ of the company?

Ans. I think some time in 1880.

Cross-int. 19. Up to the time when he, George A. Wade, left, will you state precisely what your duties were?

Ans. I had charge of supplying all metal parts for the buttons; also charge of the machinist work.

Cross-int. 20. Do you mean that you had charge and control of the machinists before George A. Wade left?

Ans. I mean to say I had charge of the machinist depart-
175 ment. There were other machinists employed by the company on special tools which I did not have charge of.

Cross-int. 21. Under whose direction or control had you charge of the machinists of the company before George A. Wade left?

Ans. When I first commenced to work for the company I used to consult Mr. W. W. Wade in regard to work in the machinist department; he also showed me about the dies for manufacturing the parts; later, I had full control myself.

Cross-int. 22. Were you under the direction of George A. Wade or was he under your direction and control?

Ans. We were both under the direction of Mr. McCleery. I was not under his control nor was he under mine.

Cross-int. 23. Was you under the direction of William W. Wade or was he under your direction and control in that department?

Ans. When I was first employed as superintendent of the department I consulted Mr. W. W. Wade in most all cases of dies—manufacturing dies; also in furnishing parts.

Cross-int. 24. Did you ever act independently in that department of George A. Wade or William W. Wade prior to the time of George A. Wade's leaving?

Ans. About some things I did.

Cross-int. 25. Do you mean to say about that that you acted against their instructions or wishes?

Ans. I do not.

Cross-int. 26. Did Lord, that you have mentioned, ever see a button machine or know anything about button-making when he came into the employ of the company?

Ans. I don't think he did.

Cross-int. 27. Do you claim the direction and control of Mr. Lord while he was thus employed?

Ans. I do not; before Mr. George Wade left, at the time Mr. Lord worked for the company, Mr. George Wade had charge of Mr. Lord.

Cross-int. 28. Do you mean again to repeat that Mr. McCleery hired you?

Ans. Yes, sir; I do.

176 Cross-int. 29. Where and when?

Ans. At the Boston Button Company's factory, at the time I called and Mr. Wade showed me through the factory.

Cross-int. 30. Then, you talked with Mr. Wade?

Ans. I did.

Cross-int. 31. Was Mr. McCleery a machinist?

Ans. He was not.

Cross-int. 32. Under whose directions were all the machines, both supply machines and button-covering machines, during the time until Mr. George A. Wade left?

Ans. The covering machines were under Mr. George Wade's direction and charge; all other machines were made under my charge.

Cross-int. 33. Who made and altered the other machines?

Ans. Mr. Newell.

Cross-int. 34. Under whose direction?

Ans. Mr. W. W. Wade's, I think.

Cross-int. 35. What did you mean by saying that Mr. McCleery had charge of the factory?

Ans. Mr. McCleery had charge of all help—hiring and discharging, regulating pay, also buying supplies.

CHARLES H. HAVEN.

Attest: WINSLOW WARREN,
Special Examiner.

Second Deposition of William McCleery.

BOSTON, *Dec.* 2, 1882.

Direct examination by HENRY C. HUTCHINS, Esq., of counsel for defendants:

Int. 1. Will you please state what materials are used in the manufacture of buttons?

Ans. Metals, such as iron, brass, and zinc, almost every description of cloth fabrics, also paper.

Int. 2. What of these are purchased or produced here and what abroad?

Ans. Paper, zinc, — brass are produced here, and I should say ninety per cent. of the cloth fabrics which we use are of foreign manufacture, and all the iron is foreign.

177 Int. 3. What of these were purchased in Boston and what in New York?

Ans. Paper, brass, and zinc were purchased in New England; all other materials, most of them, were purchased from importers and manufacturers' agents in New York, and some were ordered directly from the manufacturers abroad.

Int. 4. After the company came into Boston, in 1876, who made all these purchases and gave these orders for the Boston Button Company?

Ans. I made the purchases and gave the orders.

Int. 5. What part, if any, did Mr. William W. Wade purchase or order?

Ans. Nothing of the above that I know of.

Int. 6. Who paid for all these things?

Ans. The book-keeper of the company.

Int. 7. Who drew the checks of the company?

Ans. I did.

Int. 8. Whether, to your knowledge, Mr. Wade ever drew a check after you came into Boston.

A. No.

Int. 9. Please state what, if anything, of the materials used by

the Boston Button Company were purchased or ordered by William W. Wade.

Ans. I know of no materials used in the construction of our buttons that were bought by Mr. Wade since we came to Boston.

Int. 10. After you came to Boston who hired and discharged and fixed the wages of the help employed?

Ans. I did, or gave authority to the heads of each department to do so.

Int. 11. Please state the arrangement after you came to Boston or the plan or scheme for the management of the business of the Boston Button Company.

Ans. I was to have general charge of the factory and business. The work was divided into departments as follows: Mr. Haven had charge of the machines, machinery, and help required for making the metal parts for the buttons; Mr. George Wade had charge
178 of the covering machines; Mr. Taylor had charge of the order department, scrap cutting, and shipping; these departments covered the manufacture. Mr. William W. Wade was to devote his time to the perfection of the machinery in all the departments.

Int. 12. Had Mr. Wade a desk in the counting-room?

Ans. He had.

Int 13. How much of his time did he spend in the counting-room?

Ans. Most of it while he was in the building.

Int. 14. I repeat the question, whether you ever saw the model which he sent to Washington in the office of the company.

Ans. I never did.

Int. 15. Whether you were at any time aware that he was preparing schedules or forms for application for a patent for the improvement in question.

Ans. I was not.

Int. 16. Whether at any time Mr. W. W. Wade accompanied you to New York to purchase goods for the Boston Button Company.

Ans. He never did.

Cross-examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Cross-int. 17. Between February, 1876, and April, 1879, a little over three years, will you state how many machines of all kinds were made, altered, and put into your factory?

Ans. I could not state definitely.

Cross-int. 18. Name all you can recollect of supply machines?

Ans. I should say about thirty.

Cross-int. 19. Under whose direction were these, as well as the covering machines, built?

Ans. Mr. William W. Wade's.

Cross-int 20. How many of what you call supply machines were invented by Mr. Wade, if you know?

Ans. I do not know.

Cross-int. 21. How many, in your best belief?

Ans. I do not know that any of them are the invention of Mr. Wade.

179 Cross-int. 22. Do you know that all of them are not?

Ans. I do not.

Cross-int. 23. Did you ever see any like them anywhere else, in the main?

Ans. Yes; I have; but whether they are exactly like them in construction I could not say.

Cross-int. 24. Of how many of them have you seen what appeared to be similar machines?

Ans. Of all the foot machines that we had made in Boston I have seen similar machines.

Cross-int. 25. Do you think that these thirty supply machines, more or less, could have been constructed under the direction of Mr. Wade and invented, so far as he did invent them, as well as all the covering machines mentioned in this deposition, while he was sitting for most of the time in the counting-room?

Ans. While in the counting-room he might have thought them out.

Cross-int. 26. Do you think he had much time during those three years for much other service or work?

Ans. It must be remembered that these thirty supply machines, more or less, did not embrace thirty different kinds of machines, but only four or five kinds, and that they were put into operation as quickly as possible after coming from the machine shops, and consequently Mr. Wade could have had time to improve and invent other machines.

Cross-int. 27. Do you know how much time was required in the inventions and manufacture during those years?

Ans. After the drawing and patterns had been made Mr. Wade had only to superintend the setting up of the machines after they came from the machine shops. There may have been some slight alterations made on them in our factory, but nothing that I think would take up much time of Mr. Wade's.

Cross-int. 28. Do you know whether any drawings were ever made other than those mentioned in this deposition?

Ans. I do not.

Cross-int. 29. Do you know how much time was required reasonably for those inventions and manufactures?

180 Ans. I do not.

Cross-int. 30. Why did you buy supplies for these button machines?

Ans. Because I had charge of all the buying of the materials mentioned.

Cross-int. 31. It was not, then, because you had better knowledge than any one else, but because it was in your line?

Ans. It was because that I had better knowledge of the cloth fabrics needed for our business than Mr. Metcalf or Mr. Wade or any other person in our factory that I bought them.

Cross-int. 32. How early did you acquire that superior knowledge?

Ans. 1874.

Cross-int. 33. And how long before 1874 had you been a button-maker?

Ans. I never made buttons myself.

Cross-int. 34. How long had William W. Wade been a button-maker?

Ans. I couldn't state, but will say that button-making and buying of button materials are entirely different.

Cross-int. 35. When you began to purchase did you change the parties of whom you bought, or were they largely of the same parties of whom Mr. Wade had bought?

Ans. I bought from some of the same, changed some parties, and purchased from many new parties.

Cross-int. 36. Who introduced you to the old sellers?

Ans. I know of no introduction I ever had.

WILLIAM McCLEERY.

Attest: WINSLOW WARREN,
Special Examiner.

181 *Further Evidence for Complainant, Taken Pursuant to the Sixty-Seventh Rule of the Supreme Court of the United States, in Equity, as Amended, Before me, Winslow Warren, Special Examiner.*

Present: Baxter E. Perry, Esq., of counsel for complainant; Henry C. Hutchins, Esq., of counsel for defendants.

Third Deposition of William W. Wade.

BOSTON, *Dec.* 2, 1882.

Direct examination by BAXTER E. PERRY, Esq., of counsel for complainant:

Int. 1. Whether you ever showed the model of your machine sent to Washington to Thomas McBriar or had any conversation with him about it.

Ans. I did. I brought my model into the office, called his attention to it, talked more or less about it, and he said it was very nice; that was his reply.

Int. 2. After June 30, 1877, did you hire or discharge help, sign checks, or purchase goods?

Ans. I probably hired help. I did not sign checks, as I know—don't know but I did; I presume I did not purchase goods, because our lines were all laid for the purchase of goods and they were only to be ordered. The iron, the paper, the zinc has been constantly and steadily bought of the same parties since I went into the business, twenty-five years ago. I know that, because no other parties make these goods.

Int. 3. After June 30, 1877, what time did you spend in the factory, and whether McBriar could know whether you were there or not?

182 Ans. I spent all the time in the factory except what was necessary to superintend and invent the different machines

for our business, which consisted of about one hundred machines of ten or twelve different kinds, and adapting them to our business. McBriar could not know whether I was in the factory or not. His place was in the office and I was in the other part of the building.

Int. 4. What were the duties of William L. Taylor in the company?

Ans. His duties were to take the buttons after they were made, cause them to be examined by the girls, counted and put into boxes ready to ship; also, as has been said, to take the rags and give them to the girls to be cut.

Int. 5. Did he ever decide on samples or give orders for stock?

Ans. I should say not by any means.

Int. 6. Did he have any knowledge or experience that would qualify him for anything save the duties he discharged?

Ans. No, sir; he had not.

Int. 7. Where was his place in the building, and could he tell whether you were in or out?

Ans. In the early part of our being in Boston he was near the office a short time. Latterly his place was in the extreme corner from the office, and he knew nothing about my being out or in the office, as he only came there for orders about shipping goods out of the factory.

Int. 8. Was his place or was he permitted in the office to hear your stories and read your poems and essays?

Ans. He was not.

(Cross-examination waived.)

W. W. WADE.

Attest: WINSLOW WARREN,
Special Examiner.

183 The following is the opinion of the circuit court in accordance with which the decree was entered dismissing the bill of complaint in this cause.

Statement of the Case by the Court, Prefixed to the Opinion.

Circuit Court of the United States, District of Massachusetts.

WILLIAM W. WADE
v.
HENRY B. METCALF *et al.* } No. 1475, Equity Docket —.

Wade, the plaintiff, was connected with the defendant Metcalf in the business of making buttons by machinery from 1868 to 1880. In 1875 the defendant McCleery was associated with them, and a firm called the Boston Button Company was formed, in which the plaintiff had an interest of one-quarter, Metcalf of one-half, and McCleery of one-quarter. In 1869 Wade obtained two patents for improvements in machines for making buttons, which were understood to be owned by the firm, and one-half interest, which was afterwards assigned by Wade to Metcalf, is still owned by him.

When the new firm was formed, in 1875, a part of the stock was in twelve machines, which contained Wade's improvements of 1869. Afterwards Wade made other improvements from time to time, which were fitted to the old machines, and new machines were built, to which these new inventions were attached or into which they were incorporated. The new machines were built and the old machines were experimented upon and altered at the expense of the firm, were their property, and were worked for their benefit. In July, 1879, the plaintiff applied for a patent on his new improvements, and one was granted in June, 1880, No. 228,233. His partners insisted that he was bound to give them a share of all inventions made by him upon this class of machines during the continuance of the partnership, and he insisted that they had no right even to use his later inventions in the machines which the firm owned. Upon this there arose discussion and ill-feeling, and after some attempts by the plaintiff to put an end to the firm by notice and by bill in equity
184 a contract was agreed on and signed and sealed by the parties, by which the defendants paid the plaintiff $12,000 and assumed all the debts of the company and he conveyed to them all his interest in the assets and good-will of the firm.

The contract declared that whereas forty-eight machines containing certain improvements had been manufactured by the firm and were in use by them, and Metcalf and McCleery claimed the right as members of the firm, by virtue of such manufacture and use, to continue the use, which Wade reserved the right to deny, nothing in the sale and conveyance should operate to impair the rights of either party.

This suit is brought to restrain the use of those machines and decide the question thus left open.

G. L. Roberts and B. E. Perry, for the plaintiff; H. C. Hutchins and H. Wheeler, for the defendants.

Opinion of the Court. April 12, 1883.

LOWELL, *J.:*

It is admitted by the plaintiff that the forty-eight machines were built and altered at the expense of the firm and were lawfully used by them to the date of the patent, and that they were conveyed to the defendants by the contract of dissolution, and that they may use them if they will remove the improvements patented in 1880. The defendants maintain their right to use them with all their improvements.

Most of the six improvements covered by the latest patent were invented and put in use more than two years before the plaintiff's application for his patent of 1880, but as to two of them there is a serious dispute whether they were completed so early as to be forfeited. A nice question was made upon this state of the evidence—whether distinct and separable devices, not co-operating with the others, might not be forfeited, though those others were invented within the two years and though all were applicable to parts

185 of the same machine, so that they were properly joined in a single patent. I do not find it essential to the decision of the case to pass upon this question.

I find the defendants to be well sustained in the position that they have a right to use these forty-eight machines. Their case seems to come within the very words of Rev. Sts., § 4899, that every person who purchases of the inventor or discoverer or with his knowledge and consent constructs a machine or patentable article before his application for a patent or who uses one so constructed shall have the right to use and vend to others to be used the specific thing so made or purchased without liability therefor. This section of the statute, which first appeared in the law of 1839, § 7, 5 Sts., 354, has been usually applied to the case of employer and workman. If the workman, by using the tools and time and money of his employer, with his consent makes an invention and applies it in his employer's business the employer may continue to use it. If the improvement is a process it has been held that the employer may continue to practise the process for the whole period of the patent. McClurg *v.* Kingsland, 1 How., 202; Chabot *v.* American Buttonhole Co., 6 Fisher, 71. But if the invention pertains to a machine it is understood that only the specific machine or machines which have been so made are licensed. Pierson *v.* Eagle Screw Co., 3 Story R., 402; Brickett *v.* Mayor of New York, 7 Fed. Rep, 479.

The plaintiff contends that this law only applies to employers and employed; but there is no such limitation in the statute. When the plaintiff, as a member of the firm and at the joint expense, made and altered these machines and permitted their use by the firm, how does he escape the statute by being himself one of the firm? The law was applied without hesitation to a case of this kind in Slemmer's appeal, 58 Penn. St., 155.

Again, the plaintiff contends that if the statute has any 186 application it only grants a limited and personal license to a certain legal individual called a firm, which ends when the firm ends; but the section in question describes in unmistakable language a complete and perpetual release of the specific articles from the monopoly.

There is another way of stating the case. It is admitted that these machines were the property of the firm. It follows, without reference to § 4899, that all the members of the firm have an equal proportionate right in them. No partner can, by dissolving the connection, acquire a disproportionate share in the joint property. This is a fundamental rule of justice which does not need to rely on a written law. To the extent of their respective interests, which happens to be three-quarters, the defendants were the makers or purchasers of these machines, as they stand, with their improvements. When the firm was dissolved and the plaintiff consented to convey all the assets to the defendants his reservation of an exclusive right in an important part of the machines was useless and void. I do not mean that it was repugnant on its face. The reservation saved that; but, by reason of his being only a part owner, he could not have this exclusive right. Indeed, I understand the contract of

dissolution to agree that if the defendants while remaining members of the firm might use the improvements they should have the right to continue to the use, notwithstanding the dissolution. The question left open was whether they ever had any such right. The plaintiff admitted in that contract, very properly, as I think, that whatever right the firm had would survive to the defendants. That the firm might use the machines which were built by and operated under the supervision of the plaintiff and used by them for some years with his consent is clear.

Bill dismissed with costs.

187 *Prayer for Reversal and Assignment of Errors.* (*Filed April* 9, 1885.)

Circuit Court of the United States, District of Massachusetts. In Equity.

WILLIAM W. WADE *v.* HENRY B. METCALF *et al.*

The above-named complainant, conceiving himself aggrieved by the final decree entered on Apr. 12, A. D. 1883, in the above-entitled cause, doth hereby appeal therefrom to the Supreme Court of the United States, and complainant prays that this his appeal may be allowed and that a transcript of the record, proceedings, and evidence in the cause, duly authenticated, may be sent to the Supreme Court, and for the reversal of said decree.

And for errors therein he assigns—

First. That the statute, Rev. Stat. 4899, cited in support of the decree should not have been held applicable to complainant's case, because he, as an individual inventor, was simply at work completing and perfecting his invention, primarily for his own benefit, in his own mechanical department of the firm's business, and, though he used his improvements with some benefit to the
188 firm in their successive stages of trial and test and used the money of the firm for certain disbursements connected therewith, he did not thereby make the firm, as an independent, distinct "person," a purchaser or constructor, with his knowledge and consent, of the improvements within the meaning of the statute or the user of improvements "so constructed" within such meaning.

Second. That the use by the firm under these circumstances was, if anything more than a use by complainant, a permissive use or special license during the existence of the partnership, giving the other members of the firm such interest only as belonged to their respective shares, but no entire or exclusive use during the life of the machines, as found by the decree.

Third. That such limited rights to use the improvements were not enlarged by the contract of dissolution, and that no rights were sold thereby in these improvements which could be terminated at the dissolution, and that these rights were in fact terminated by the reservation in the contract.

B. E. PERRY,
Solicitor for Complainant.

189 UNITED STATES OF AMERICA, } ss:
Massachusetts District, }

I, John G. Stetson, clerk of the circuit court of the United States for the first circuit and district of Massachusetts, certify that the foregoing is a true copy of the record of said circuit court in the cause in equity entitled William W. Wade *v.* Henry B. Metcalf *et al.*, lately determined in said circuit court, and of all proceedings therein and of the opinion of the court and of the prayer for reversal and assignment of errors filed therein.

In testimony whereof I hereunto set my hand and affix the seal of said circuit court, at Boston, in said district, this first day of September, in the year of our Lord one thousand eight hundred and eighty-five, and of the Independence of the United States the one hundred and tenth.

[Seal of the Circuit Court, Massachusetts.]

JOHN G. STETSON, *Clerk.*

190 The United States of America to Henry B. Metcalf, of Pawtucket, in the State of Rhode Island, having his usual place of business in Boston, within the district of Massachusetts, and William McCleery, of said Boston, Greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States to be holden at Washington on the second Monday of October next, pursuant to an appeal claimed and allowed by the circuit court of the United States for the district of Massachusetts in a cause in equity lately determined in said circuit court, wherein William W. Wade, of Medford, in the State and district of Massachusetts, is complainant and appellant and you are defendant, to show cause, if any there be, why the decree rendered against the said complainant in said cause should not be reversed and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Le Baron B. Colt, circuit judge of the United States for the first judicial circuit, this eighth day of April, in the year of our Lord one thousand eight hundred and eighty-five.

LE BARON B. COLT,
U. S. Circuit Judge, First Judicial Circuit.

191 [Endorsed:] Eq. 1475. Wm. W. Wade *vs.* Henry B. Metcalf *et al.* Citation. United States marshal's office, 140 Tremont St., Boston, Mass., April 9, 1885.

UNITED STATES OF AMERICA, } ss:
Dist. of Massachusetts, }

BOSTON, *April* 9, 1885.

Pursuant hereunto I have notified the within-named parties to appear at court, as herein directed, by delivering this day in hand

to William McCleary two duly attested copies of this precept, he accepting one of said copies for his partner, Henry B. Metcalf.

N. P. BANKS,
U. S. Marshal.

Fees:

Service	4 00
Copies	2 00
Travel	12
	6 12

Endorsed on cover: Massachusetts C. C. U. S. No. 163. William W. Wade, appellant, *vs.* Henry B. Metcalf and William McCleery. Filed October 20, 1885.

192 STIPULATION OF COUNSEL.

Stipulation.

Supreme Court of the United States.

WILLIAM W. WADE
v.
HENRY B. METCALF & *al.* } No. 163.

In the above-entitled cause it is stipulated and agreed that the clerk may add to the record a certified copy of letters patent of the United States No. 228,233, dated June first, 1880, and that the same shall be treated with equal force and effect as if it had formed part of the evidence for the complainant in the record as originally transmitted to this Court from the circuit court for the district of Massachusetts.

GEO. F. BETTS,
Of Counsel for Plaintiff.
HENRY WHEELER,
Of Counsel for Def'ts.

193 (2–175.)

Cost, $6.50; paid.

DEPARTMENT OF THE INTERIOR.

[Vignette.]

UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the records of this office of the letters patent granted William W. Wade June 1st, 1880, No. 228,233, for improvement in machines for making buttons.

In testimony whereof I, R. B. Vance, acting Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 10th day of September, in the year of our Lord one thousand eight hundred and eighty-eight, and of the Independence of the United States the one hundred and thirteenth.

[Seal Patent Office, United States of America.]

R. B. VANCE,
Act'g Commissioner.

194 (2–155.)

No. 228,233.

The United States of America to all to whom these presents shall come:

Whereas William W. Wade, of Medford, Massachusetts, has presented to the Commissioner of Patents a petition praying for the grant

of letters patent for an alleged new and useful improvement in machines for making buttons, a description of which invention is contained in the specification, of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of law in such cases made and provided; and

Whereas, upon due examination made, the said claimant is adjudged to be justly entitled to a patent under the law:

Now, therefore, these letters patent are to grant unto the said William W. Wade, his heirs or assigns, for the term of seventeen years from the first day of June, one thousand eight hundred and eighty, the exclusive right to make, use, and vend the said invention throughout the United States and the territories thereof.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the city of Washington, this first day of June, in the year of our Lord one thousand eight hundred and eighty, and of the Independence of the United States of America the one hundred and fourth.

[Seal Patent Office, United States of America.]

A. BELL,
Acting Secretary of the Interior.

Countersigned:
E. M. MARBLE,
Commissioner of Patents.

(Here follows diagrams marked pp. 195–200.)

201 UNITED STATES PATENT OFFICE.

WILLIAM W. WADE, of Medford, Massachusetts.

Machine for Making Buttons.

Specification forming part of Letters Patent No. 228,233, dated June 1, 1880; application filed July 26, 1879.

To all whom it may concern:

Be it known that I, William W. Wade, of Medford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful improvements in machines for making covered buttons, which improvements are fully described in the following specification.

My present invention consists of certain improvements upon the machine invented by me, and for which letters patent were granted to me April 27, 1869, by means of which improvement certain defects are remedied and the machine made more effective and less liable to disarrangement. These improvements embrace alterations and additions to my machine as patented in 1869, whereby certain new functions are added and the scope of the machine greatly enlarged.

In the machine heretofore in use it has only been possible to manufacture buttons the front or cover of which is of one piece, and which

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Machine for Making Buttons.

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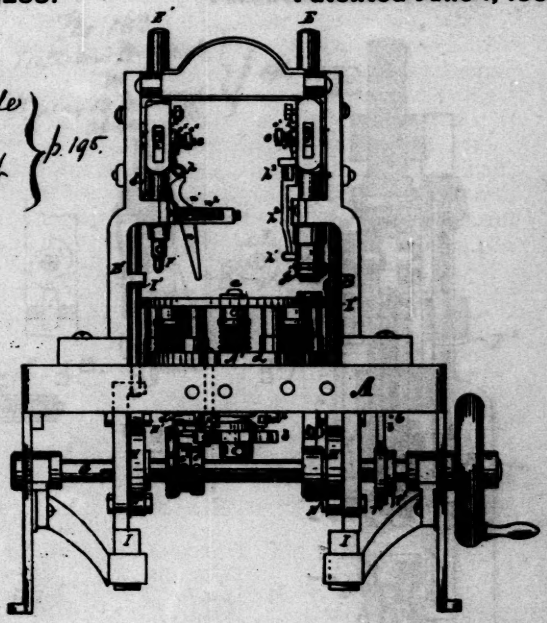


Fig. 1.

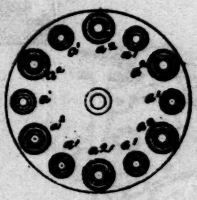


Fig. 2.

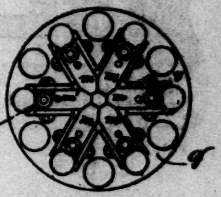
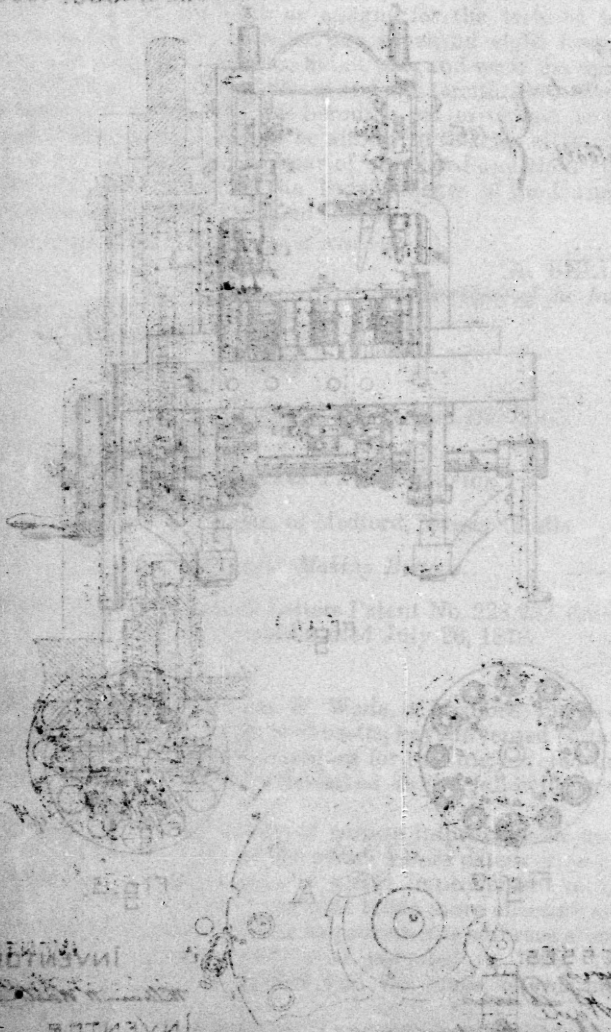


Fig. 3.

WITNESSES
F. L. Davis.
N. Clifford Wade.

INVENTOR
William W. Wade



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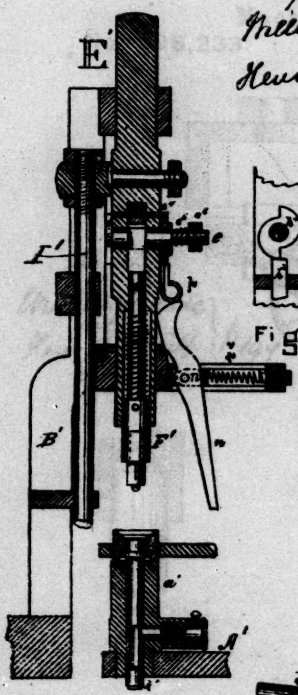

Fig. 4.

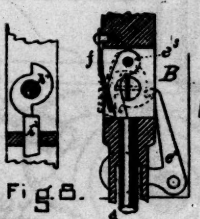

Fig. 8. Fig. 9.

Fig. 7.

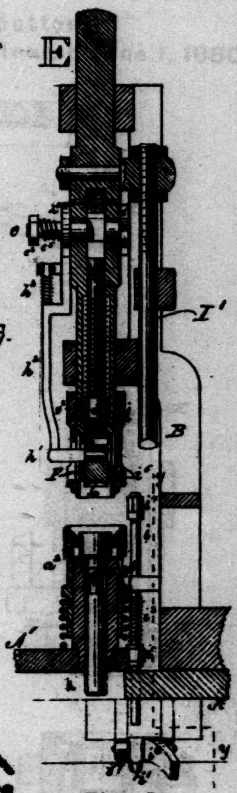

Fig. 5

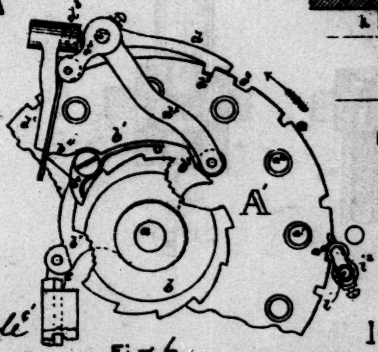

Fig. 6.

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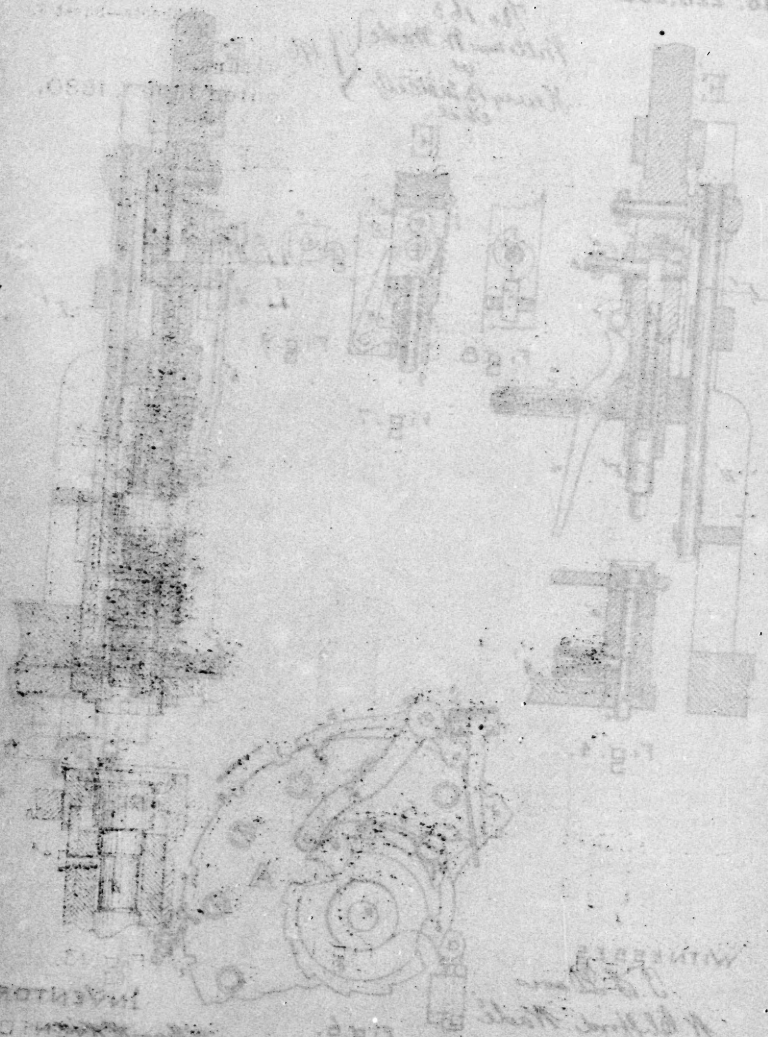
H. Clifford Wade

INVENTOR
William W. Wade



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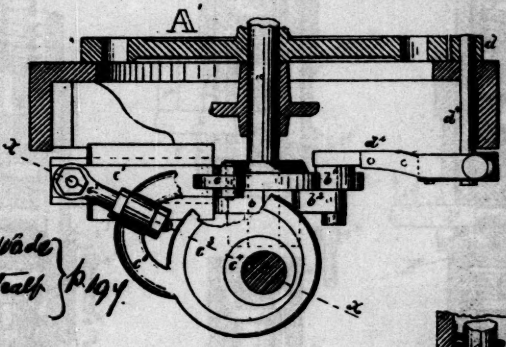

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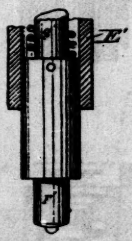
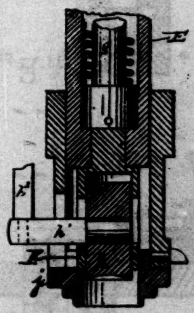
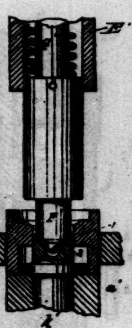
Fig 10







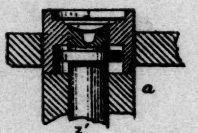


Fig. 11.

Fig. 12.

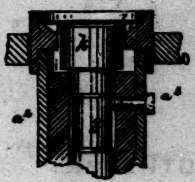


Fig. 13.

WITNESSES

T. L. Davis

H. Clifford Wade

INVENTOR

William W. Wade

Fig. 13.

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INVENTOR

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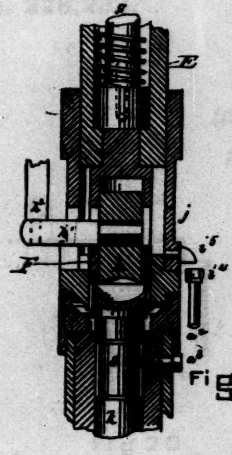
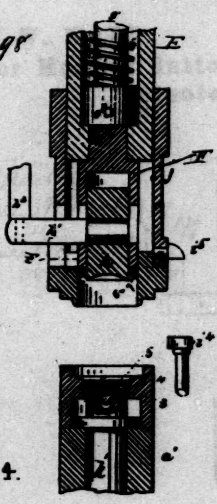


Fig. 14.



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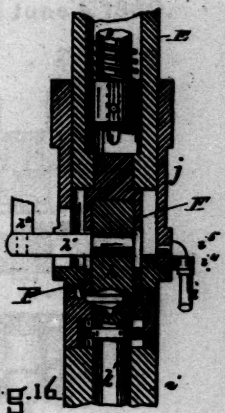

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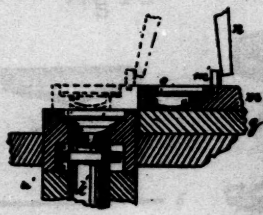

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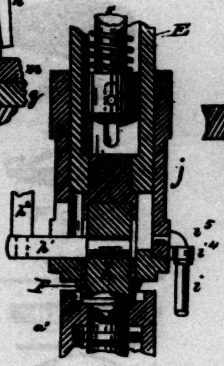

Fig. 17.

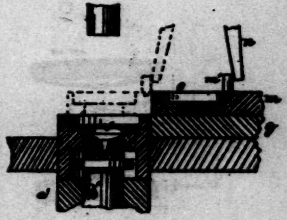

Fig. 19.

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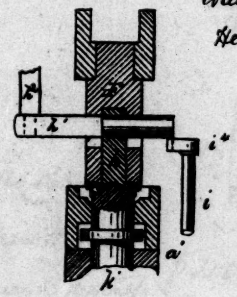

Fig 20

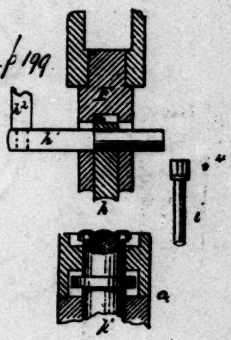

Fig 21.

Fig. 25.

Fig. 22.

Fig. 27.

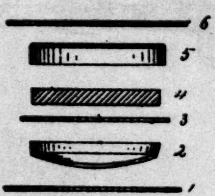

Fig. 26.

Fig. 23.

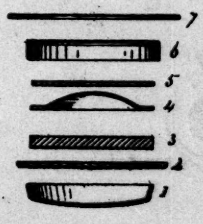

Fig. 24.

Fig. 28.

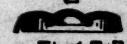

Fig. 29

Fig. 30.

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INVENTOR

William W. Wade

Fig 20.

Fig 24.

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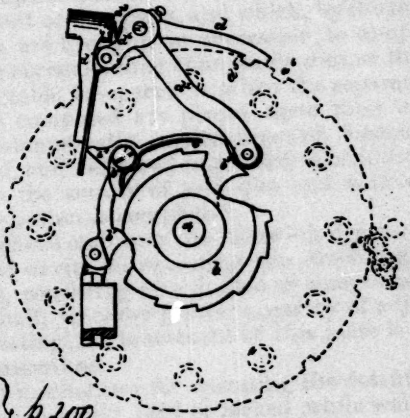

Fig 31.

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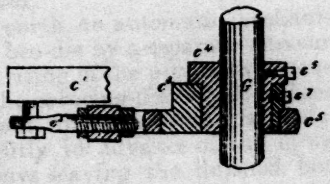

Fig. 32.

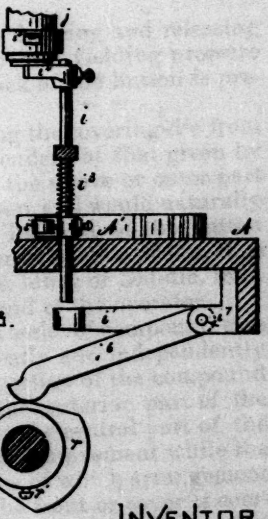

Fig. 33.

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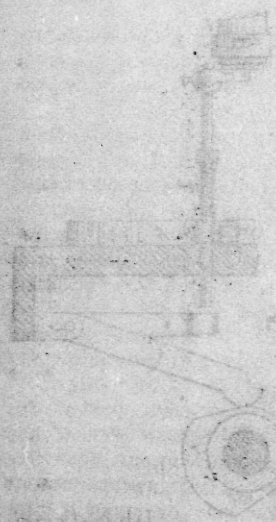
W. Clifford Wade

INVENTOR
William W. Wade



are designated as "plain" buttons, while my improved machine enables me to make buttons the fronts or covers of which may consist of two or more pieces of different patterns or colors, thus adapting the machine to the manufacture of a great variety of styles in what are termed "fancy" buttons.

The general plan and organization of my machine is similar to that of my earlier invention, patented in 1869, embracing (like that) a revolving duplex series of composite or changeable bed-dies, one half of which are adapted to make the back parts of the buttons and the other half the front or face parts, and which, by the intermittent rotation of the series, are brought, in succession, to co-operate with two pistons carrying corresponding changeable dies, so that by their joint and interchangeable co-operation, when the separate pieces of which the button is composed are placed upon their appropriate dies, they will be automatically carried forward, formed to shape, put together, secured, and delivered in a finished condition without being released from the control of said dies and without manual intervention till the button is completed.

My improved machine embraces the following devices:

First, an improved device for operating the revolving plate containing the bed-dies, consisting of a double or compound eccentric upon the driving-shaft, whereby greater accuracy of adjustment in the mechanism actuating the movement of this plate is secured, as will be hereinafter described.

Second, improved mechanism for operating the detent, by which the die-plate is more securely held or locked while waiting at rest to meet the co-operating piston-dies.

Third, an oscillating chock for alternately holding and releasing the piston-dies, so as to present either a rigid or a yielding pressure as the bed-die containing the front of the back of the button is presented.

Fourth, an automatic mechanism for lifting the covering-die from the bed-die by a separate movement, independent of that given by the rising of the piston, by means of which the sleeve or outer part of the covering-die (which embraces the button, and would naturally take it up in its ascent) is made to release its hold of the button slightly in advance of the upward movement of the piston, thus always leaving the finished button on the lower or bed-die, from which it may be readily removed by the hand of the operator.

Fifth, the construction and operation of a series of compound dies in which the separate parts move automatically and independently of each other—as, for instance, the central portion of the compound piston-die may remain stationary while the exterior part of the same has performed a part of its ascent, or the central part of the compound bed-die may be given an upward movement while the exterior part of the same is at rest, by means of which arrangement I am enabled to make buttons in which the front or cover is composed of two or more parts as rapidly and accurately as if the cover consisted of a single piece. The process will be hereinafter fully set forth.

Sixth, the device for feeding the parts of the buttons to the dies

whenever a guide is necessary to place the parts centrally upon the dies, which consists in providing for each alternate bed-die a sliding plate perforated to receive the part. These sliding plates are placed radially about a common center coincident with the center of the plate holding the dies, and so arranged that, by means of a swinging lever secured to the upright frame and operated by the movement of the piston, the lower end of which lever engages with a
202 pin projecting from the surface of the slide, each slide, when brought to a point abreast of the piston, is moved outward from said center until the opening containing the part is brought beneath the piston-die, and said part is pushed through into the bed-die by the descending piston-die, and the slide is returned to its position for receiving other pieces by the action of a spring.

The description of these devices and their relation to their co-operating parts will be readily understood by reference to the drawings accompanying this specification, in which—

Figure 1 represents a front elevation of the machine complete. Figs. 2 and 3 represent the feeding-plates, Fig. 3 exhibiting my device for feeding the parts automatically. Figs. 4 and 5 are sections showing the movable pistons in their connection with the upright frames, also the manner of securing the dies to the pistons and their relation to the lower or bed dies. Figs. 7, 8, and 9 are cross-sections, showing the mechanism of the alternating motions within the pistons. Fig. 6 is a view of the revolving die-plate, looking upward from beneath it, and shows the ratchet and pawl used to turn the plate and the detent for holding the same. Fig. 10 is a vertical cross-section, showing the complete mechanism for turning the revolving die-plate. Figs. 11, 12, and 13 show the construction and positions of the several dies. Figs. 14, 15, 16, and 17 are also sections, showing the positions of the dies in different stages of their operation. Figs. 18 and 19 are sections showing the parts of the automatic feeding device and their relation to the bed-dies. Figs. 20 and 21 show the positions of the dies in different stages of the process of making the compound cover. Fig. 22 is a perspective view of the finished compound button, Fig. 23 being a section, and Fig. 24 representing the parts of the same in detail. Fig. 25 is a section, and Fig. 26 the parts in detail, of a button composed of six parts, both front and back being covered with cloth. Fig. 27 is a section, and Fig. 28 the parts in detail, of a button composed of only four parts, one of the parts being of metal. Figs. 29 and 30 exhibit the form and parts of the upper half of another style of compound buttons, two of these parts being of metal. Fig. 31 is an additional view of the parts shown in Fig. 6, showing more clearly the construction of the ratchet and pawl and their connections. Fig. 32 is a cross-section taken on the line marked *x x* in Fig. 10, showing the construction of the compound eccentric and the strap connecting it with the slide. Fig. 33 is a cross-section taken on a dotted line, *y y*, in Fig. 5, showing the lifting device and its connections with the cam on the main shaft, the revolving die-plate, and the piston-die.

A is the bed or frame upon which the working parts of the machine are severally arranged, as shown.

A′ is a horizontal circular revolving plate, mounted upon the top of a vertical shaft, *a*, and resting upon the bed A. Upon the disk of this revolving plate is arranged a duplex series of bed-dies, alternating, as seen in Fig. 2 (marked a' and a^2).

Upon the bed A, and overhanging the revolving plate, two upright frames, B B′, are secured, which carry respectively the pistons E and E′. These pistons, on opposite sides of the die-plate, carry at their lower ends dies, denominated "piston-dies," and marked F F′ in Figs. 4 and 5. These piston-dies co-operate with the bed-dies a' a^2 in the revolving die-plate as the latter are successively brought beneath the pistons.

G is the main shaft, which receives the power and carries the cams which give motion to the several operative parts of the machine.

The two cams H H, by means of the rollers H′ H′ on the sliding pieces I I and the rods I′ I′, leading up to the pistons E E′, give to the pistons a vertical reciprocating movement to an extent proper to bring their respective dies to the bed-dies, where they operate upon the materials placed upon the latter in forming the button.

The bed-dies a' a^2 are placed in the revolving plate A′, at equal distances apart, in a circle near the periphery of the plate, as shown. These dies consist of several separate and exchangeable parts adapted to make the styles of buttons required.

In each of the pistons E E′ a mortise is cut, as shown, Figs. 4 and 5, and a bore extends from the lower end of the piston to the mortise. Within this bore works a stem, *g*, connected at its lower end with the movable parts of the piston-dies, as in my patented machine above referred to, its upper end terminating at the lower edge of the mortise.

An arbor, *e*, extends through the piston across this mortise. To one end of the arbor is secured a four-toothed ratchet, e', and the other end is provided with a spiral spring and a nut, by means of which a washer (which is fitted to the arbor with a groove and spline) is pressed against the side of the piston, producing a slight friction, and thus prevents the arbor from being thrown too far in consequence of the rapid motion of the piston, and also from turning back by the drag of the pawl.

The pawl e^2 is secured to the frame B, and at each upward movement of the piston engages with one tooth of the ratchet e', so as to give to the arbor *e* one-fourth of a revolution.

The part of the arbor which is within the mortise is cut away at its sides, giving it the form of a flat bar, as shown in Fig. 7.

It will be observed that at each quarter-turn of the ratchet the flat part of the arbor will assume alternately first a horizontal and then a vertical position.

203 The piece e^3 which I term an "oscillating chock," is pivoted above the arbor, against which it is held by means of the spring *f*, and as the arbor is turned an oscillating motion is imparted to the chock, whereby its lower end is at every alternate movement of the piston brought over the end of the stem *g* whenever the flat side of the arbor is presented to the chock (see Fig. 7),

thus holding the movable part of the piston-die in an extended position while co-operating with one of the bed-dies, and allowing it to recede when the next bed-die is presented to the piston-die. The manner in which this oscillating chock operates is indicated by the dotted lines in Fig. 7.

The revolving die-plate A′ is secured to the upright shaft *a*, which forms the axis upon which it revolves. To the lower end of this shaft (see Figs. 10, 6, and 31) is attached a ratchet-wheel, *b*, having as many teeth in its periphery as there are dies in the revolving plate A′. This ratchet-wheel is worked by the pawl b^2, which is attached to the vibrating plate *b′*. The plate *b′* is of a sectoral form, and embraces the shaft *a* loosely. At one point of the sector it is connected by the link *c* to the sliding bar *c′* (see Figs. 32 and 6). At another point it has a cam-shaped depression, as shown at b^3.

The sliding bar *c′*, by means of the pitman c^2 and a strap, c^5, Figs. 10 and 32, is connected with the compound eccentric, which latter is composed of, first, the inner eccentric, c^4, secured to the shaft G, and made adjustable thereon by means of the set-screw c^6, Fig. 32, and, second, the outer eccentric, c^3, secured upon c^4, and made adjustable thereon by the set-screw c^7.

By means of the two eccentrics thus arranged the throw can be varied and the movement of the sliding bar can be adjusted with the greatest accuracy. Thus it will be seen that when the shaft G revolves the sliding bar *c′* will receive a reciprocating motion, and by means of the link *c*, Fig. 6, a vibrating motion is given to the arm or sector *b′*, which carries the pawl b^2, which latter engages with the teeth of the ratchet-wheel *b* and turns the shaft *a*, carrying with it the die-plate A′, the ratchet-wheel *b* being so adjusted as to bring the bed-ties successively and exactly under the piston-dies in the working of the machine.

The device denominated in this specification a "detent" is a provision against any possible accident arising from the die-plate being carried too far by its inertial moment, and to secure more perfect accuracy in the position of the dies when brought together.

An arm, *d*, is secured to a shaft, d^4, which arm, at its free end, engages with suitable notches d^5 cut into the periphery of the die-plate A′. This shaft d^4 passes through the bed A, and to its lower end is attached an arm, d^2, which is bent, as shown, and has at its extremity a roller, which bears upon the cam-shaped surface of the vibrating plate *b′* at the point of the sector marked b^3.

Connecting with an offset on the hub of the lever d^2 is a spring-lever, *d′*, so arranged that by means of the spiral spring d^3 a pressure is exerted to bring the long end of the lever *d′* inward or toward the offset d^6 of the lever d^2. A lug, b^4, on the vibrating plate *b′* engages with this lever *d′*, and as the plate *b′* moves forward, carrying with it the ratchet-wheel *b* (by means of the pawl b^2 engaging with one of its teeth) and the die-plate A in the direction shown by the arrow, Fig. 6, the lug strikes the spring-lever *d′*, moving it outward and compressing the spiral spring d^3 until the roller in the lever d^2 reaches the depression at b^3, into which it drops, and thus there is imparted a partially-rotating motion to the shaft d^4, and the arm *d*

of the detent is swung against the die-plate A′ a little before the notch is reached, the spring d^3 receiving the motion during the slight interval in which the arm d rests against the die-plate before it drops into the notch, thus preventing injury to the parts, as might occur if they were rigid.

By this arrangement the detent is made to drop instantly into the notch when the latter is reached, and thus the possibility of the die-plate being carried too far by its inertial motion or otherwise is obviated.

It is also apparent that by placing the detent at the periphery of the die-plate the advantage of its greater diameter is secured, and with it the greater accuracy in the operation of the bed-dies.

The construction and operation of the compound dies will be understood by reference to Figs. 4 and 5.

The piston-die F′, which, in connection with bed-die a', forms the backs of the buttons, is attached to spindle g' of piston E′, which extends through the bore to meet the chock e^3, and the die F, which, in connection with die a^2 and sleeve j, forms the front of the button, is attached to piston E. Sleeve j is attached to spindle g in the same manner as in my patented machine. A spiral spring surrounds the shank, forcing it down, and its motion is limited by the pin g^2, which works in a slot in the lower part of the piston. (Not shown in the drawings.)

In the machine heretofore in use by me I have only employed a movable spindle in the bed-die which formed the back of the button. Now, to enable me to make the different styles of fancy buttons, I provide all the bed-ties with movable spindles. The die a', which is the one used to form the back of the button, is substantially the same as the one heretofore used, and the spindle in the die a^2, which is the one which forms the front of the button, is substantially the same as that in a', excepting that it has a neck cut near its upper end, s, in Fig. 5, into which is introduced a screw or pin, a^3, which, meeting the shoulders of this cut, prevents the spindle from rising out of place at the rising of the piston-die. This form of
204 spindle is used instead of what in my earlier invention was termed a "post," and was secured in the die by a set-screw. The spindles are moved by adjustable levers beneath the bed-dies worked by cams upon the shaft G. (Not here shown.)

The piston-die F has a movable center-piece, h, sliding loosely in its socket, and having an arm, h', which extends through suitable slots far enough to support the end of the bar h^2. This bar has a bearing at its upper end in a support secured to the piston E, as shown, and a spiral spring, h^3, between this support and an angle or offset in the bar exerts a downward pressure upon the latter, thus keeping the center-piece h extended except when it is forced back by engaging with the bed-die or with the lifting device, hereinafter explained. The upper and loose end of the bar named is acted upon by the cam h^4 on the arbor e, which cam is more fully shown in Fig. 8.

The device which I employ to lift the covering-die from the finished button is shown in Figs. 5 and 33.

The upright rod i has its lower bearing in bed A of the machine, through which it passes. Its upper end is provided with a support which is attached to the upright frame B. This rod i is round, and is allowed to swing slightly from its vertical position and turn loosely in its bearings. Its lower end rests upon the arm i', as shown most distinctly in Fig. 33, which arm is hinged to a lug, i^7, attached to the bed A, and is forked or divided. The longer part i^9 engages with the cam r on the shaft G. This cam r is adjustable on the shaft by means of the set-screw r', and is so adjusted as to raise the rod i slightly in advance of the upward movement of the piston-die.

The arm i^2 is secured to the rod i (see Figs. 6 and 33), and is provided at its free end with a roller. By means of a spiral spring, i^3, this roller is held constantly against the periphery of the die-plate A'. Against each alternate die a notch or depression, a^6, is cut in the die-plate, into which, as the plate revolves, the roller in the arm i^2 drops, thereby swinging the end of the lifting-arm i^4, Fig. 33, under the lug or pin i^5 in the covering die. As the cam r engages with the arm i^6 of the lever i' it lifts the rod i, and, by means of the arm i^4 engaging with the lug i^5, raises the die j from the button, at the same time allowing the center-piece h, which has no hold upon the button, to be the last to leave it, and thus the button may remain upon the bed-die to be removed by the hand of the operator.

My improved feeding-plate (shown in Fig. 3) is for feeding parts of the button to the dies.

Upon the plate q, which surmounts the die-plate, there are six sliding plates, m, each arranged to move outward from the center of the die-plate and to bring the opening o centrally between the piston-dies and the bed-dies.

A swinging lever, n, is pivoted to a suitable support on the frame B', and, instead of being attached to a rigid support, is pivoted to a block, n', which has a sliding motion within its frame and is held in place by a spring, n^2.

The lever n receives a swinging motion by the action of the piston E' and the attached roller p, which, acting upon the curved end of the lever n, as shown in Fig. 4, moves the lower end toward the piston-die. This lever moves the sliding plates in the required direction.

It will be seen that if the sliding plate m should meet with any obstruction the spring n^3 will yield, and, the upper end of the lever also yielding, will allow the roller p to pass without injury occurring to any of the parts of the machinery.

The motion of the lever n is timed with that of the die-plate, so that as the piston E' descends it engages against each alternate die with the pin m' (seen most distinctly in Fig. 19), and moves the sliding plate m outward until the opening o is under the piston-die, and the part of the button which is carried in the opening o is pushed through this opening by the descending piston-die and pressed centrally into its place, uniting it with the other parts of the button, which lie on or in the bed-die beneath it. The sliding plate m is

then carried back to receive its new charge by a spring between it and the die-plate. (Not seen in the drawings.)

In the operation of the machine power is applied to revolve the main shaft G at the required speed, and at each revolution the pistons are brought down upon the bed-dies while the latter are at rest. When the pistons rise the revolving die-plate A′ is turned one notch of the ratchet-wheel in the direction indicated by the arrow, Fig. 6, by the mechanism already described, and this brings the next dies in the series successively under the pistons. Again, as the pistons rise the ratchets e' engage with the stationary pawls e^2 and bring the oscillating chocks e^3 alternately opposite to the spindles g, which are attached to the movable dies, as shown.

The machine is operated by two attendants, one at each side of it, supplied with the materials used in parts previously shaped for the process of uniting them into a button.

In a button of the kind shown in Fig. 22, a section of which is shown in Fig. 23, there are the several parts indicated in Fig. 24—viz: first, the metallic collet at the back of the button; second, the canvas which, protruding through an opening in the center of the collet, forms the shank or eye—the part by which it is sewed to the garment; third, the paper filling; fourth, a metallic shell sustaining the darkly-shaded portion of Fig. 22; fifth, the cloth for the cover of this darkly-shaded portion; sixth, the metallic rim-shell; and, seventh, the rim-cover of cloth.

One of the attendants places upon the die a', Fig. 11, the
205 metallic collet 1, and canvas 2, and when, by the movement of the die-plate A′, this die has come under the piston-die F′, and the piston descends, the point of the piston-die forces the canvas 2 through the opening in the collet and forms the shank of the button, as shown in Fig. 12, the piston-die being at this time extended and the chock e^3 bearing against the spindle g'. At the same time the other attendant places the rim-shell 6 and the rim-cover 7 on the die a^2, as shown in Fig. 13, the spindle k being now at its lowest point, the center-piece h of the piston-die held at its most extended point, and the cam h^4 having its full side to the upper end of the bar h^2.

When the dies come together the spindle k is raised, by the action of the cam and lever upon which it rests, to the position shown in Fig. 14, and the rim shell and cover are forced up into the annular space between the center-piece h and the sleeve or die j, and are taken up within the piston-die when the latter rises. (See Fig. 15.)

Simultaneously with the upward movement of the piston E and its die the die-plate A′ has turned and brought the bed-die a' underneath it, the latter die having meanwhile received the addition of parts 3 (paper filling), 4 (metallic shell), and 5 (center cover.) The spindle k' being at its lowest point, and the center-piece h held down only by the spring h^3, when the dies next come together the upper edge of the rim-cover 7 is turned under or into the rim-shell 6, and the center-piece h yielding as it reaches the center shell and cover (Figs. 15, 4, and 5), the inner edge of the rim-cover is turned under,

and while in this position the spindle k' is raised and all the parts of the button are securely closed together.

It will be observed that at this point the arm i^3 of the lifting apparatus is in the position shown in Fig. 6; and also, in Fig. 33, it is seen that the arm i^4 is swung under the lug i^5, and the lever i' is raised by the action of the cam r, and at the same time the sleeve or outer part, j, of the die is raised from the bed-die and the button left upon the same, to be removed by the hand of the attendant. The position of the parts at this time is shown in Fig. 17.

The button shown in Figs. 25 and 26 is composed of six parts, the entire back of the button being covered with cloth, and as silk is generally used for this these buttons are called in the trade "silk-backs."

In Fig. 26 are represented the back cover, 1, the collet 2, the canvas 3, the filling 4, the shell 5, and the front cover, 6. It is formed by a process similar to that already described, the dies employed being only slight modifications of those shown in Figs. 14 and 15.

The button shown in Figs. 27 and 28 is composed of only four parts—viz., a canvas back, 1, the paper filling 2, metallic shell 3, and cloth cover 4. It is in the manufacture of this button and that of the silk-back that the feeding-plate shown in Fig. 3 is especially required. As there is no collet used, some device to place the filling in the center of the cloth when the upper and lower dies come in line with each other is necessary. The cloth back 1 is placed upon the bed-die a', as shown in Fig. 18, the paper filling being at the same time placed within the opening o in the sliding plate m, Fig. 19. Simultaneously with the die a' being moved under the piston-die the downward motion of the piston E' causes the lever n to swing in the manner already described, and to move the sliding plate m into the position indicated by the dotted lines, when the descending piston-die, passing through the opening o, forces the filling into the die a' centrally with the canvas 1, already within that die. At this juncture the co-operating piston-die, bearing the shell 3 and cloth cover 4, which it has in its turn taken up, as elsewhere described, engages with the die a', and the button is closed in the manner already described.

The feeding-plates are also sometimes employed in making buttons in which a metallic collet is used, and the back of the button or of this collet is covered with cloth, in which case the collet and the canvas 1 are both placed within the opening o of the sliding plate, while the cloth back is placed upon the bed-die, as before, and as shown in Fig. 18, when, by a movement similar to that already described, the canvas and collet are carried together into the bed-die centrally with the cloth-back cover.

Figs. 29 and 30 show a section and the detailed parts of the upper or front part of a compound button, which is sometimes made separately, the front and back parts of the same button thus made being united by a subsequent process, the compound cover being considered as one part, and consisting of the center shell, 1, center cover, 2, rim-shell 3, and rim-cover 4. These parts are placed upon the bed-dies in the following order, viz: The rim-shell 3 and rim-cover

4 are placed upon the bed die a^2, while the parts 1 and 2 are placed within the bed-die a'.

In the descent of the piston-die F upon the bed-die a^2 the center-piece h (held down in its most extended position by the bar h^2) forces the inner edge of the rim-cover through the opening in the rim-shell, and passes through this opening so far as to take up these parts 3 and 4 with it in its ascent. Simultaneously with this ascent of h the bed-die a', bearing parts 1 and 2, is brought under the same piston-die, and the latter now descends upon a', the spindle k' rises and forces parts 1 and 2 up through the opening of the rim shell and cover, from which opening the center-piece h (having been released from its rigid position) is also forced up and out of said opening, and all these parts (1, 2, 3, and 4), now brought together, are securely united and the compound cover is completely formed.

In this process it will be observed that before the parts are
206 clinched together it is necessary that the pressure of the center-piece h should be removed before the dies separate, otherwise the center-shell might be forced back and the parts then separated. I therefore extend the arm h' through the socket of F, bringing its end within the path of the arm i^4 of the lifting device, and the center-piece h is thus lifted from the button-cover just as the sleeve j is lifted in the process of making a complete button, already described.

When the parts of the front of this compound button are clinched together, as they are upon the ascent of the spindle in the bed-die, the front is united to the back of the button by the process already described in the making of the plain button.

From the description as now given it will be apparent that by the use of the different improvements herein set forth, with such variations in the changeable dies as are required by the different sizes and shapes of buttons, I am enabled to make both plain and fancy buttons in a great variety of styles in the most perfect manner and at much less cost than by processes heretofore employed.

It will also be apparent that the mechanism employed for lifting the covering-die from the finished button may be varied from that herein described and other means employed to effect the same result without affecting the principle of my invention.

In a machine for making buttons, I claim the following new and improved devices:

1. The combination of the detent or pawl d, upright shaft d^4, lever d^2, flexible lever d', vibrating plate b', provided with projection b^4 and depression b^3, link c, sliding bar c', pitman c^2, strap c^5, and compound eccentric c^3 c^4, substantially as described.

2. In a button-making machine, the combination of the piston E and partible die, carried thereby, with mechanism to separate the parts of said die when required and hold the same asunder, substantially as described.

3. The combination of an upright spindle, i, arm i^2, spring i^3, arm i^4, attached to said spindle i, die-plate A', provided with notches a^6, lever i' i^6, cam r, piston E, and sleeve j, having lug i^5, whereby

sleeve j is lifted from off the bed-die at the proper time to leave the finished button upon the die, substantially as described.

4. The die-plate A′, plate q, series of sliding plates m, each plate having an opening o, and a pin, m', in combination with lever n, roller p, and piston E′, substantially as described.

5. The plate Q and sliding plates m, each having an opening, o, and pin m', in combination with piston E′, carrying roller or stud p, lever n, and yielding block n', inclosed in a frame which is rigidly attached to the upright B′, substantially as described.

6. The device for alternately holding in a fixed position and releasing the spindle g of the piston-die E, consisting of arbor e, formed as described, and ratchet e', in combination with oscillating chock e^3, its spring, and pawl e^2, substantially as described.

7. A. compound piston button-die having a movable center-piece, h, in combination with arm h', bar h^2, arbor e, cam h^4, ratchet e', and pawl e^2, substantially as described.

WILLIAM W. WADE.

Witnesses:
T. S. DAVIS.
W. CLIFFORD WADE.

207 [Endorsed:] Supreme Court U. S. 1888, October term. No. 163. William W. Wade, app't, *vs.* Henry B. Metcalf *et al.* Stipulation of counsel and addition to record. Office Supreme Court U. S. Filed Sep. 12, 1888. James H. McKenney, clerk.

1 Supreme Court of the United States.

WILLIAM W. WADE
v.
HENRY B. METCALF & *al.* } No. 163.

In the above-entitled cause it is stipulated and agreed that the clerk may add to the record a certified copy of letters patent of the United States, No. 89450, and that the same shall be treated with equal force and effect as if it had formed part of the evidence for the complainant in the record as originally transmitted to this court from the circuit court for the district of Massachusetts.

GEO. F. BETTS,
Counsel for Appellant.
HENRY WHEELER,
Of Counsel for Def'ts.

2 (2–175.)

DEPARTMENT OF THE INTERIOR.

[Vignette.]

UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the records of this office of the letters patent granted William W. Wade April 27, 1869, number 89450, for improvement in machine for making covered buttons.

In testimony whereof I, Benton J. Hall, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this — day of January, in the year of our Lord one thousand eight hundred and eighty-nine, and of the Independence of the United States the one hundred and thirteenth.

[Seal Patent Office, United States of America.]

BENTON J. HALL,
Commissioner.

3 (2–155.)

No. 89450.

[Vignette.]

The United States of America to all to whom these letters patent shall come:

Whereas William W. Wade, of Medford, Massachusetts, has alleged that he has invented a new and useful machine for making covered

buttons, and has made oath that he is a citizen of the United States; that he verily believes he is the original and first inventor or discoverer of the said invention, and that the same hath not, to his knowledge and belief, been previously know or used; has paid into the Treasury of the United States the sum of thirty-five dollars, and presented a petition to the Commissioner of Patents praying that a patent may be issued therefor:

These are, therefore, to grant to the said William W. Wade, his executors, administrators, or assigns, for the term of seventeen years from the twenty-seventh day of April, one thousand eight hundred and sixty-nine, the full and exclusive right and liberty of making, using, and vending to others to be used, the said invention, a description whereof is given in the annexed schedule, and made a part of these presents.

In testimony whereof I have caused these letters to be made patent and the seal of the Patent Office to be hereunto affixed.

Given under my hand, at the city of Washington, this twenty-seventh day of April, in the year of our Lord one thousand eight hundred and sixty-nine, and of the Independence of the United States of America the ninety-third.

[SEAL.]

W. T. OTTO,
Acting Secretary of the Interior.

Countersigned and sealed with the seal of the Patent Office.

SAM'L S. FISHER,
Commissioner of Patents.

(Here follows diagrams marked pp. 4 to 9, incl.)

10 UNITED STATES PATENT OFFICE.

WILLIAM W. WADE, of Medford, Massachusetts.

Machine for Making Covered Buttons.

Specification forming part of Letters Patent No. 89450, dated April 27, 1869.

To all whom it may concern:

Be it known that I, William W. Wade, of Medford, in the county of Middlesex and State of Massachusetts, have invented a new and useful machine for making covered buttons and other similar articles; and I do hereby declare that the following is a full, clear, and exact description of the construction and mode of operation of the same, taken in connection with the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of the machine. Fig. 2 is a plan of the same with a part in horizontal section above the bed. Fig. 3 is a vertical transverse section. Fig. 4 is a horizontal section through the plane of the driving-shaft, looking upward. Fig. 5 is a vertical longitudinal section through the center of the driving-shaft. Fig.

6. Sheets. Sheet. 1.

W. W. Wade,
Button Machine.

No. 89,450.

Patented. April 27. 1869.

No. 163
Wade
Metcalf
et al.
p. 4

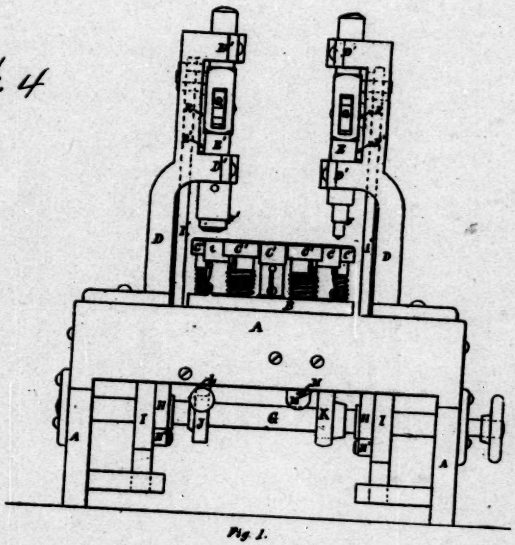


Fig. 1.

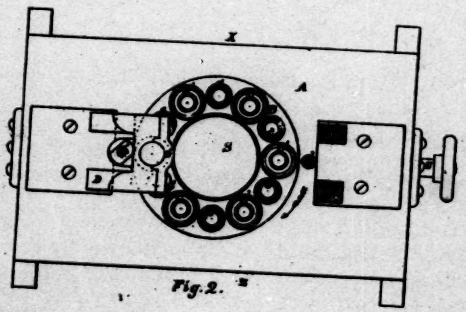
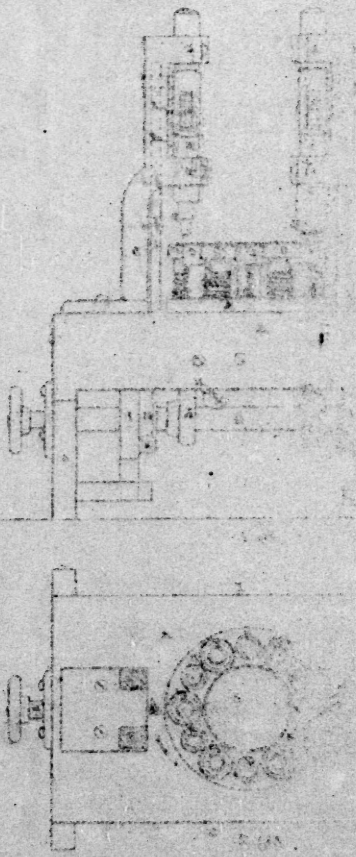


Fig. 2.

Witnesses. { N. C. Lombard
F. S. Gogin

Wm. W. Wade Inventor



W. W. Wade,
Button Machine.

No. 89450. Patented April 27. 1869.

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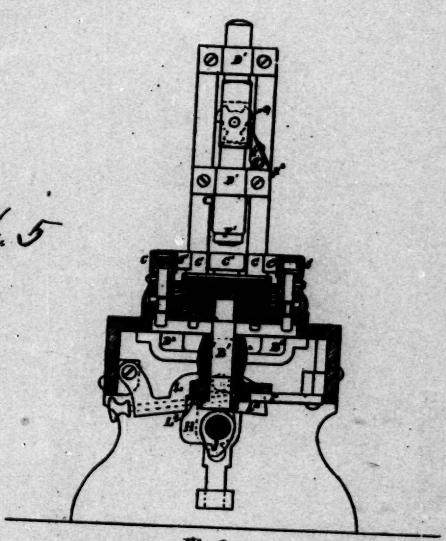


Fig. 3.

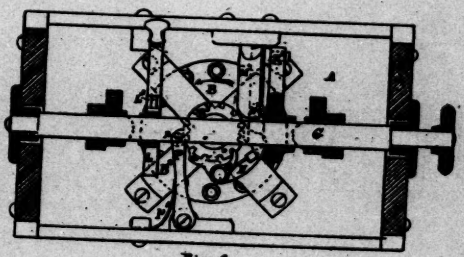
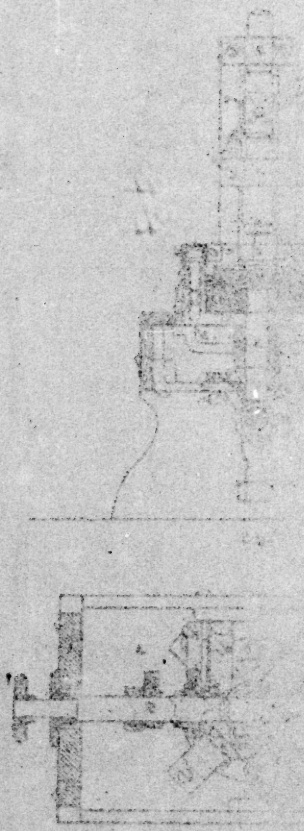


Fig. 4.

Witnesses { N. C. Lombard
F. S. Cogin.

W. W. Wade Inventor.



6. Sheets. Sheet 3.

W. W. Wade,

Button Machine.

No. 89450.

Patented. April. 27. 1869.

No. 163. Wade v Metcalf et al. } p. 6

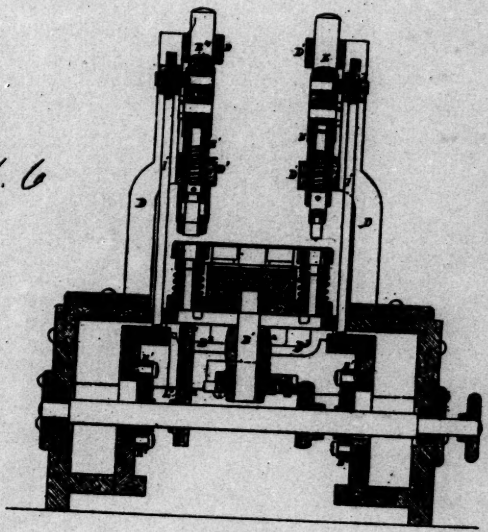


Fig. 5.

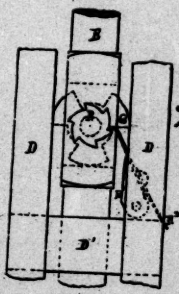
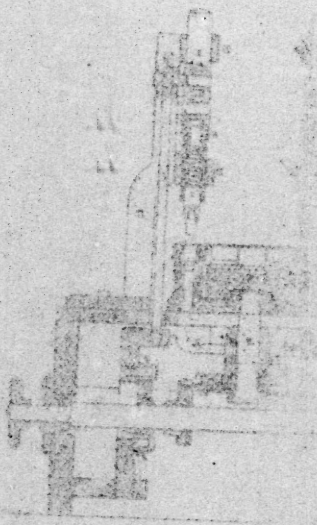
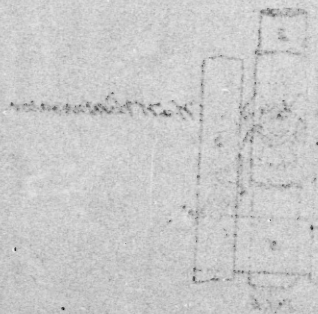


Fig. 6.

Witnesses.
N. C. Lombard
G. S. Gogin

W. W. Wade Inventor.





6. Sheets, Sheet 4.

W. W. Wade.

Button Machine.

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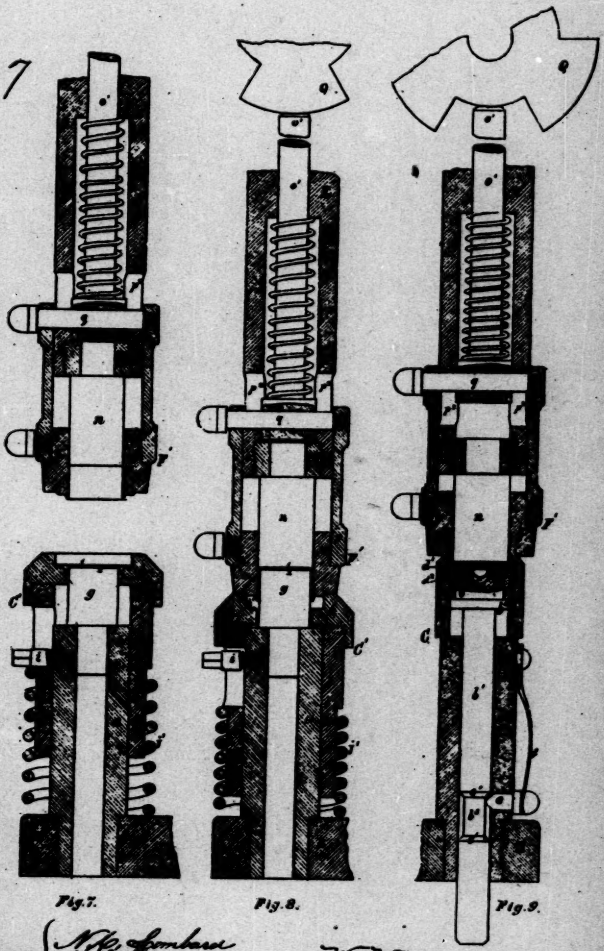
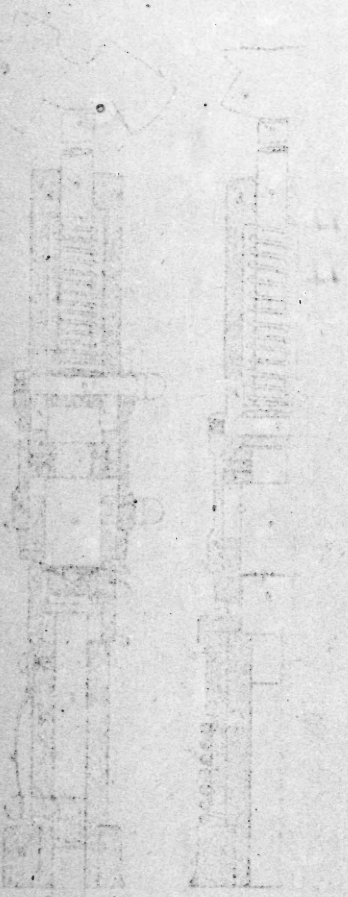


Fig. 7. Fig. 8. Fig. 9.

Witnesses { N. C. Lombard, F. S. Gogen

Wm. W. Wade Inventor.



6 Sheets. Sheet 5.

W. W. Wade,

Button Machine.

No. 89,450. No. 163 Wade & Metcalf et al } p. 8. Patented April 27 1869.

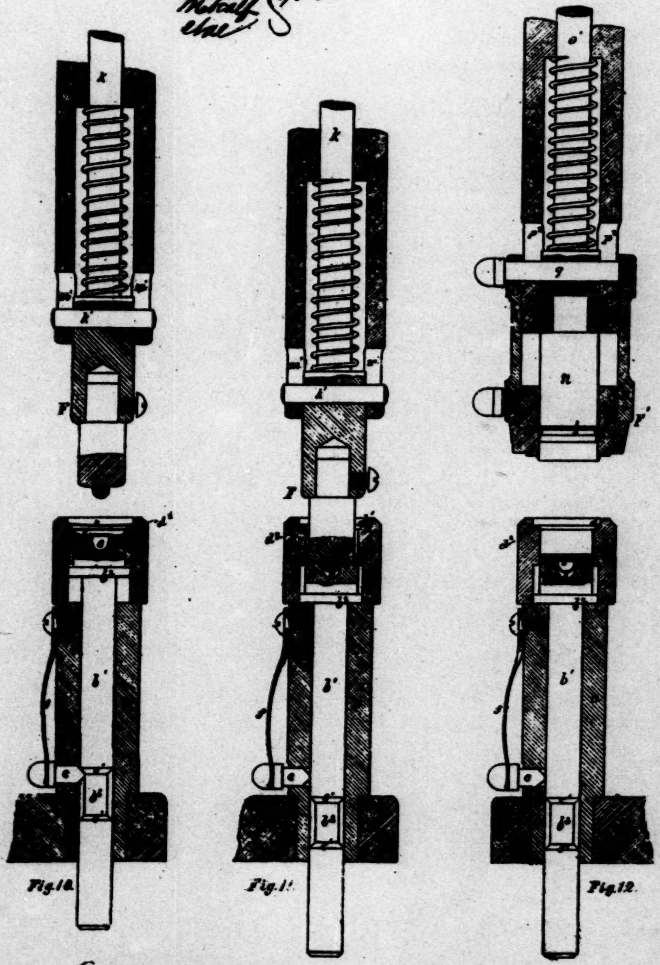
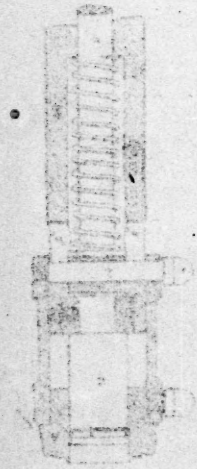
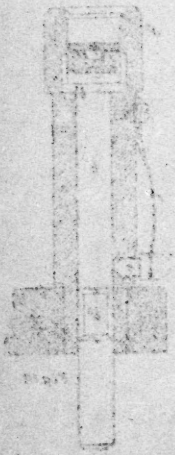


Fig. 10. Fig. 11. Fig. 12.

Witnesses. { N. C. Leonhard
J. S. Gogin

Wm. W. Wade Inventor





6 Sheets Sheet 6

W. W. Wade,
Button Machine.

No. 89,450. Patented April 27, 1869.

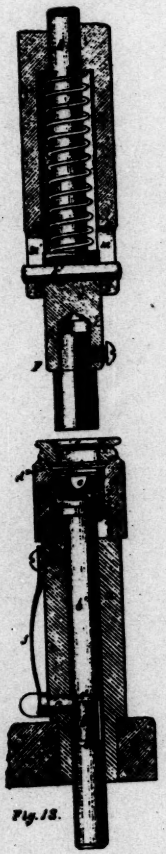


Fig. 13.

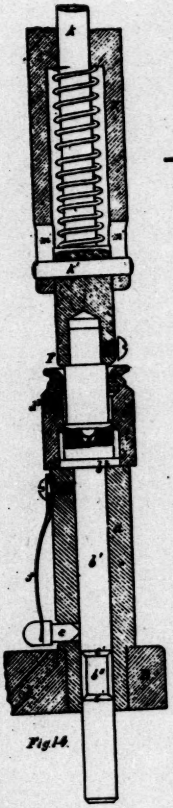


Fig. 14.

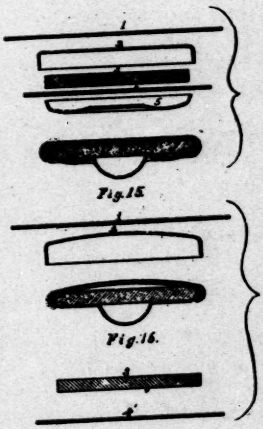


Fig. 15.

Fig. 16.

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et al.
p. 9

Witnesses { N. C. Lombard
F. S. Gozin

Wm. W. Wade Inventor.

6 is a detail showing the back side of the piston. Figs. 7, 8, 9, 10, 11, and 12 are sectional views of the forming-dies, showing their various operations in the process of forming the button. Figs. 13 and 14 are sectional views of the same, with the guiding-rings used in making another kind of button. Figs. 15 and 16 are two sectional views of two kinds of button made by the machine.

My invention relates to the construction of a machine for automatically making "covered buttons," so called, from the separate pieces of material of which they are composed. The general plan of the organization of the machine may be said to consist in the employment of a revolving duplex series of composite or changeable bed-dies, one half of which are adapted to make the back parts of the buttons, and the other half to make the face parts, and which, by the intermittent rotation of the series, are brought in succession to co-operate with two pistons carrying corresponding changeable dies, so that by their joint and interchangeable co-operation, when the separate pieces or blanks of which the button is composed are placed upon their appropriate dies, they will be automatically carried forward, formed to shape, put together, and secured and delivered in a finished condition, without being released from the control of the said dies and manual intervention. The several movements of the bed-dies and their operations in concert with dies carried by the pistons are automatically performed by suitable mechanical devices in a manner that will be hereinafter described.

My invention also embraces several new principles of construction in several of the subordinate parts of the machine, which may be separately employed in other machines of this character without using the other parts of the machine. The first that I will enumerate relates to the mode of constructing and operating the dies which shape and mold the parts of the button to form and secure them together, and consist in forming the dies in separate parts, capable of different movements, which I call "composite dies," in combination with suitable actuating mechanism that will change the positions of such parts in their proper order, and cause them to co-operate successively with an opposing die, so that several separate operations may be performed upon the inclosed material before it is released therefrom. The second of these relates to the manner of arranging the dies so as to form at the same time both the back and face part of the button, preparatory to uniting them together, and consists in the employment of a duplex series of bed-dies, one-half of which receive the materials to form the back part, and the other the materials to form the face part, and so arranged as to act alternately in combination with two pistons carrying co-operating dies, by which the preparation of both parts of the button goes on simultaneously. The third of these relates to the mode of operation by which the back and face parts of the button are put together after they have been formed and prepared in the dies, as before stated, and consists in so combining the bed-die which forms the face part and the bed-die which forms the back part with the die which is carried by the piston and alternately co-operates with both of them that the face part, when it is prepared, is transferred from

the bed-die to that carried by the piston, which then, co-operating with the bed-die that forms the back, unites the two parts and secures them together. Other novelties in construction will also be shown in the description of the machine.

A is the frame or bed of the machine, upon which the working parts are severally arranged, as shown.

11 B is a horizontal revolving table mounted upon the top of a vertical shaft, B′, and resting upon the bed A of the machine. Around the circumference of this table are arranged a duplex series of bed-dies, C C′, placed alternately at equal distances apart, with their axes vertical.

Upon the top of the bed A two upright frames, D, are secured, which are placed at opposite sides of the revolving table and overhang the same and carry two pistons, E E′, which work in guides D′ on the frames. These pistons carry dies F F′ at their lower ends, which co-operate with the dies C C′ on the revolving table as they are successively brought beneath the pistons.

G is the main shaft, which receives the power and carries the cams that give motion to the several operative parts of the machine. The two cams H, by means of the rollers H′ on the sliding pieces I and the rods I′, which lead up to the pistons E E′, give to the pistons a vertical reciprocating movement of the proper extent to bring their respective dies to the bed-dies, so as to operate upon the materials that are placed upon them to form the parts of the button.

J is a cam which raises and lowers the lever L, upon the upper side of which is a projection, L′, which, lying beneath the die which is under the piston E′ when it is raised, comes in contact with the lower end of the central portion of the die C and raises it up to co-operate with the die F′ upon the piston, as will be hereinafter described. The height to which the projections L′ shall be raised is adjusted by means of the wedge-formed bearing L^2, upon which the cam J acts, by moving it in or out by the screw L^3, in a perfectly obvious manner.

K is an eccentric, which, by its rod K′, gives a reciprocating motion to a sliding block, M, which works in suitable guides in the bracket M′. The block M is connected by the link N′ to the vibrating plate N, which oscillates upon the shaft B′ as an axis, and imparts to it a measured reciprocating movement. The shaft B′ revolves in the bracket B^2, which is secured to the under side of the bed A, as is shown. Upon the lower end of this shaft is fixed an index, B^3, having as many notches in its periphery as there are dies upon the revolving table B, which is worked by the pawl O, which is attached to the vibrating plate N, as shown. The index is held at rest between its periods of movement by the detent or pawl P, which is attached to the bed A, and is held into the notches of the index by the spring P′. When the plate N is moved back to enable its pawl O to take into another notch, the projection *m* on the plate slides under the projection *p* on the pawl P and raises it out of the notch of the index, which allows the index to turn forward by the pawl O on the return movement of the plate N, when the pawl P falls into the next notch and again fastens the table in position. The

notches of the index have such a relation to the bed-dies as to bring them in succession accurately under the dies on the piston when at rest.

The pistons E E′ are made hollow, with a bore extending from the lower end to a mortise near the middle, as is shown. In this mortise is placed a circular block of metal, Q, which I call a "revolving chock," the periphery of which is cut away at three equidistant spaces to a smaller diameter, as is shown. This chock is mounted on an axis, Q′, which works in bearings in the piston, and upon the outer end of which is fixed a ratchet, R, having six teeth, which is turned one notch every time that the piston rises by means of the pawl R′, which is attached to the frame D in a perfectly obvious manner, and this brings the full part of the periphery and the cavity alternately opposite to the center or bore of the piston. The pawl R′ is held up to the ratchet by the spring R^2. Within the bore of the piston a stem works, which is connected with the movable part of the upper die, and extends upward to the under surface of the revolving chock Q, and when the full part of the chock is opposite the stem the die attached to it, when the piston descends, is held in an extended position; but when the cavity of the chock comes opposite to the stem the part of the die attached to it is allowed to recede. By this means each piston is enabled to work only with every other bed-die in the series, or with every bed-die in two positions alternately.

The bed-dies C and C′ are each made with a stock, *a*, all of which are fixed in the table B in a circle at equal distances apart, near the periphery, as shown, and made with a hole or bore extending through the center the whole length.

The dies C are those which form the back part of the button, and have an inner die, *b*, provided with a long shank or spindle, *b′*, which is fitted to the hole in the stock *a*, so as to slide therein, and extends some distance below the bottom of the table. The upper part of the inner die is made of a diameter and shape to correspond to the form of the back part of the button; and when it is at its lowest point it rests upon the top of the stock *a* by the shoulder b^2, as is seen in Figs. 11 and 12. At the center of the face of this die a recess, *c*, is made of a diameter equal to that of the projecting part of the tuft or canvas at the back part of the button, by which it is attached to the garment. At some distance above the lower end of the spindle *b′* a portion of it, b^3, is made of a smaller diameter, which is joined to the other part by the conical portions *c′*. Within this space a pin, *e*, projects when the die *b* is raised, which pin has a conical point and slides through the side of the stock *a*, and is pressed inward by the spring *f*. Upon the top of the stock *a* is placed the outer die, *d*, which surrounds the upper part of the inner die, *b*. At the upper interior corner it is made with a rabbet, *d′*, which serves as a guide in which to place the blank circular piece of canvas 4, which forms the tuft, as is seen in Fig. 10, and is also provided with a small curved portion, d^2, immediately beneath this, which assists in closing the parts of the button together, as will be described.

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The dies C′ are those which form the face part of the button. The inner die, *g*, is fixed in the stock *a*, and is of the proper form to receive the shell of metal or other substance which gives shape to the face of the button. The outer die, *h*, surrounds the inner die, *g*, and is of a diameter equal to the diameter of the button. The upper inner corner is also formed with a rabbet, *h′*, which serves as a guide to the circular blank of material 1, that forms the face or cover of the button. This die rests upon the sleeve *j*, which slides up and down a short distance upon the outside of the stock *a*, the extent of its movement being controlled by the pin *i*, which passes through a slot in the sleeve *j* and is fixed in the stock *a*. The sleeve *j* and die *h* are held up by the helical spring *j′*, which is coiled around the sleeve and rests upon the table, as is shown in the drawings.

The movable die F, which, in connection with the bed-dies C, forms the back part of the buttons, is attached to the lower end of the pistons E by a long shank, *k*, which extends upward through the bore of the piston to the chock Q. It is forced downward by the helical spring *l*, which is coiled around the shank and rests upon the shoulder *l′*. Its motion is limited by the pin *k′*, which works in the slots *m′* in the lower part of the piston, as is shown in the drawings. To make the back of the button with a metallic collet in it, the face of the die F is made with a low, rounded projection, *s*, to work in the central cavity of the die *b*, to form the projecting part of the tuft. The movable die F′, which, in connection with the bed-die C′, forms the faces of the buttons, is attached to the opposite piston, E′. The central die, *n*, is of the same diameter as the outside of the button, and is fixed to its piston and moves with it. The outer die, *o*, surrounds the die *n*, and is attached to the sleeve *p′*, which slides up and down a short distance upon the outside of the piston and has its face made of the form shown in the drawings. Within the bore of the piston the spindle *o′* slides up and down, the lower end of which is connected with the sleeve *p′* by means of the cross-bar *q*, which works through slots p^2 in the sides of the piston, and is fast in the spindle and the sleeve. The die *o* is forced downward by the helical spring *r*, which is coiled around the spindle *o′* within the hollow of the piston, as is shown in the drawings. The upper end of the spindle works against the lower side of the chock Q.

S is a raised central plate or tray upon the revolving table within the row of dies, upon which to carry the detached guiding-rings T, Figs. 13 and 14, which are used in making a certain kind of button, the manner of using which guiding-pieces will be hereinafter described.

The operation of the machine is as follows: Power is applied to the main shaft to revolve it about sixty revolutions (more or less) per minute, and at each revolution brings the pistons down at the same time upon the bed-dies beneath them, which at that time are at rest. When the pistons have risen, the revolving table is moved round one notch of the index in the direction shown by the arrow, by the mechanism described, which brings the next dies in the series under the pistons. As the pistons rise, the chocks Q are rotated one notch by thin ratchets, and bring the full parts and cavities alter-

nately opposite to the spindles that are attached to the movable dies, and which work within the pistons. The machine is operated by two attendants—one at each side of the machine, as at X and Z—supplied with the materials of which the button is composed, and which consist in a button of the kind shown in Fig. 15, of a circular piece of cloth, 1, or other material desired, to form the cover or face, a shell of metal, 2, of the form of the face of the button, with its edges turned back so as to be parallel to each other, a circular piece of thick paper or other material, 3, to fill the interior, a circular piece of canvas, 4, to form the tuft, and a metal collet, 5, of the form shown, to form the back, all of which are shown separately in section in Fig. 15 of enlarged size. The operator at X puts a collet, 5, into the die C, and lays the piece of canvas to form the tuft upon the rabbet of the outside die, *d*, as is shown in Fig. 10, and when, by the movement of the table, this die has come under the die F, the canvas is first forced down by the central projection, *s*, into the cavity *c*, and then by a continuation of the movement of the die F the inner bed-die, *b*, is forced downward by overcoming the resistance of the spring *f* and pushing back the pin *e* into the position shown in Fig. 11. When this takes place, the chock Q over the die F is placed so that its full part is presented to the top end of the spindle *k*, which holds the die extended downward. At the next revolution of the main shaft the bed-die C′ is brought under the die F empty, and at this time, the chock Q having been turned so as to bring a cavity over the spindle *k* of the die, when the piston descends the die is pushed back into the piston as it comes in contact with the central part of the bed-die, but performs no other operation. When the bed-die C, holding the collet and tuft pressed into it, has passed this piston to the side Z of the machine, the other attendant places the paper blank into it, as is seen in the lower die of Fig. 12, and also places a metal shell, 2, upon the central part, *g*, of the die C′, with its flanges downward, and upon the rabbet *h′* of the outer die, *h*, the circular piece 1 for the cover is placed. When this die comes under the movable die F′, the full part of its chock is over the spindle *o′*, so that when the piston descends it holds the outer die, *o*, extended, and as it comes in contact with the outer bed-die, *h*, the latter is pushed downward, compressing the spring *j*, which turns the covering 1 downward over the shell 2 and deposits them both in the upper die, which takes them up with it when the piston rises, as is shown in Fig. 12. The table is then turned again, which brings the next bed-die C, carrying the collet, the tuft, and the paper filling-piece beneath the die F′, holding the covering and shell, with the check turned so as to present a cavity over the spindle *o′*, as seen in Fig. 12. The piston then descends, when the outer die, *o*, coming in contact with the outer bed-die, *d*, is arrested, and the inner die, *n*, pushes the covering and shell down onto the bed-die *d*, by which the edge of the covering which projects beyond the shell is turned inward by the curved surface d^2 of the die *d* immediately below the rabbet *d′*. At this time the lower end of the spindle *b′* of the inner die, *b*, being over the projection L′ of the lever L, is raised by the cam J, which movement forces the back part of the button

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upward into the face part, carrying forward and doubling the edge of the covering over the edge of the shell, and by a further compression of the parts thus inclosed within the dies the curved part d^2 of the outer die, *d*, clinches the edge of the shell over the edge of the collet, brings the button to the proper form, and holds the covering and tuft firmly between them, as is shown in Fig. 9. When the piston has risen and the bed-die has passed out from beneath the piston, the spindle b' will have passed off from the projection L′ and dropped down so as to rest upon the pin *e* in the recess b^3 when the button is removed by the operator. Thus it will be seen that the die F works with the bed-die C only, while the die F′ works with both of the bed-dies C and C′.

In making buttons without the collet—such as is shown in Fig. 16—the operator at X first lays the piece 4, to form the tuft, upon the rabbet d' of the bed-die *d*, and then places over the same a guiding-ring, T, as is shown in Fig. 13, in which is placed the paper filling-piece 3, so that when the bed-die has come under the piston F the paper will be forced down into the tuft truly and shaped to form, as is seen in Fig. 14. After the bed-die has co-operated with the movable die F, the guiding-ring T is removed by the operator at Z, to enable the bed-die to co-operate with the other movable die, F′, as before described, and is placed upon the tray S within the row of dies, from which it is taken by the other operator, as required for use.

Instead of using detached guiding-rings, as shown, I have used automatic guides, which were automatically applied to and removed from the appropriate bed-dies; but such construction complicates the machinery, and in practice I prefer the detached rings; and other subordinate devices are used in connection with this machine, which are not herein described, as they do not affect the mode of operation of the machine; and although I have described but one modification of the mechanism for making a different kind of button from that first described, yet other similar modifications would be required in making other kinds of buttons, such as are familiar in this manufacture.

What I claim as my invention, and desire to secure by letters patent, is—

1. A machine for forming and covering buttons automatically, constructed and operating substantially as described.

2. Forming the dies in several detached parts capable of having different movements, in combination with suitable mechanical devices for changing the positions of such parts in their proper order and causing them to co-operate with the opposing die or dies, so that several separate operations may be performed in succession upon the inclosed material before it is released therefrom, substantially as described.

3. The combination of two series of bed-dies arranged alternately in the same line of movement, which receive and form the materials to make the buttons—one of them the back parts and the other the face parts—with two co-operating movable dies, by which the prep-

aration of both parts of the button goes on simultaneously, substantially as described.

4. Combining the die which forms and holds one part of the button with the die that forms and holds the other part, so that by their co-operation the two parts will be forced together and secured, substantially as described.

5. The combination of the movable dies with the revolving chock or its equivalent, substantially as described.

6. The combination of the bed-die that forms the back part of the button with the lever L, or its equivalent, that actuates the same, substantially as described.

7. The combination, with the several composite dies, of the means described, or their equivalents, for producing a yielding resistance to the change in the relative positions of their several parts, substantially as described.

8. The employment of a removable guiding-ring, in combination with the dies that receive the paper filling-piece or its equivalent, substantially as described.

WM. W. WADE.

Witnesses:
N. C. LOMBARD.
F. S. GOGIN.

14 [Endorsed:] Supreme Court U. S. 1888, October term. No. 163. Wm. W. Wade, app't, *vs.* Henry B. Metcalf *et al.* Stipulation of counsel & addition to record. Filed Jan. 3, 1889.

Office Supreme Court U. S.
FILED.
DEC 27 1888
JAMES H. McKENNEY,
CLERK.

SUPREME COURT OF THE UNITED STATES,

OCTOBER TERM, 1888.

WILLIAM W. WADE,
Appellant,

vs.

HENRY B. METCALF and
WILLIAM McCLEERY,
Respondents.

No. 163.

BRIEF FOR APPELLANT

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Supreme Court of the United States.

WILLIAM W. WADE,
Appellant,

vs.

HENRY B. METCALF and WILLIAM McCLEERY,
Respondents.

STATEMENT.

This is a suit in equity instituted in December, 1880, to restrain the defendants from infringing the complainant's rights in letters patent issued to him June 1, 1880, for improvements in machines for making buttons, for which he had made application July 26, 1879; and particularly from using certain forty-eight machines now in their possession or any of them; and to obtain a decree for an account and payment of damages for violation of complainant's exclusive rights in said patent.

The defendants set up two defenses only:

1. That said letters patent are invalid and null because the invention and improvements therein named had been in public use in the United States by the Boston Button Company for more than two years before complainant's application for said patent.

2. That said specific machines, with the improvements patented, were constructed by the Boston Button Company, which was a partnership consisting of the complainant and the defendants, and at its expense, with complainant's knowledge and consent, and were in use by said partnership prior to complainant's application for a patent therefor. And although the partnership was dissolved in October, 1880, the defendants contend that they now have the right to use these specific machines.

Both these defenses are contested by the complainant.

The case was heard by Judge LOWELL upon pleadings and proofs, and decided in favor of the defendants, April 12, 1881, solely upon the grounds set forth in the second defense (Opinion, pp. 133–136), the bill of complaint being dismissed.

The complainant appealed to this Court (pp. 9 and 136).

Assignment of Errors.

1. The Court below erred in deciding that the bill of complaint be dismissed.

2. The Court below erred in deciding that the complainant was not entitled to an injunction and account as prayed for in the bill of complaint.

3. The Court below erred in deciding that the defendants have a right to use the forty-eight machines in controversy under and by reason of the Revised Statutes, § 4899.

4. The Court below erred in deciding that under § 4899 of the Revised Statutes there has been a complete and perpetual release of these forty-eight machines from the monopoly of the Letters Patent.

5. The Court below erred in deciding that to the ex-

tent of their respective interests, which happens to be three-fourths, the defendants were the makers or purchasers of the forty-eight machines as they stand with their improvements.

6. The Court below erred in deciding that when the firm was dissolved and the complainant consented to convey all the assets to the defendants, his reservation of an exclusive right in an important part of the machines was useless and void.

7. The Court below erred in deciding that the contract of dissolution agreed that if the defendants, while remaining members of the firm might use the improvements, they should have the right to continue the use notwithstanding the dissolution.

8. The Court below erred in deciding that the complainant admitted in the contract of dissolution, that whatever right the firm had would survive to the defendants.

9. The Court below erred in not deciding that the use of the forty-eight machines by the firm under the circumstances was only a permissive use or special license during the existence of the partnership, giving the other members of the firm such interest only as belonged to their respective shares, but no entire or exclusive use during the life of the machines.

10. The Court below erred in not deciding that the limited rights of the defendants while partners to use the improvements were not enlarged by the contract of dissolution, and that no rights were sold thereby in these improvements which could be terminated at the dissolution, and that those rights were in fact terminated by the reservation in the contract.

Facts not Disputed.

The following facts appear without dispute:

That the complainant has been a manufacturer of buttons for a long series of years, sometimes alone, and with other partners, and as a corporation, before this partnership was formed, using for most of this time the style of Boston Button Co.

That in 1869 he had patented a machine for making covered buttons, which was a very great improvement on all then known methods (pp. 11 and 45–6), and was using this machine in January, 1875, at the time this partnership was formed, and continued to use it for some time thereafter.

That before this partnership was formed and continuously from that time he was engaged in experiments trying to improve the invention of 1869.

That at the time this partnership was formed, in January, 1875, he had conveyed one-half interest in that invention to Henry B. Metcalf, one of the defendants, and the two owners gave to the firm the right to use the invention, and that he then had twelve of these patented machines of 1869, which went into the assets of the firm.

That two more machines substantially like those, but larger and containing some improvements which he had invented were constructed at Medford at the firm's expense, and the firm moved into Boston in February, 1876, bringing these fourteen machines with them.

That soon thereafter orders were given to build thirty-four new machines of the size of the two Medford machines, and with their improvements, and with some additional improvements which he had invented, and these were largely built by Newell & Co., but partly by Hough & Romney, and to some extent in the factory of the firm.

That Newell & Co. delivered their part of all these

thirty-four machines at various times between Sept. 11, 1876, and May 10, 1877.

That while these machines were being built and afterwards the twelve old machines were altered over by Newell & Co. so as to conform to the new thirty-four machines, except that their size was not increased, and were delivered to the firm—one April 27th, one May 18th, three June 21st, and five August 27th, 1877, the date of the delivery of the other two not appearing.

That these forty-eight machines are those in controversy in this suit.

That when the parts built by Newell & Co. and the parts built by Hough & Romney had all been delivered to the firm they were put together, adjusted and fitted for running in the factory of the firm, and all was at the expense of the firm.

That on to these machines, after they were thus delivered were put from time to time the new improvements covered by the letters patent, with the exception of certain of the devices of the combination which were constructed into the machines as they were thus built and altered over (pp. 22, 33, 58, 61, 65, 93).

That these improvements were successive in their invention and experimental changes and in their adaptations to the machines while they were building and after they had been built, being fourteen in number, as drawn in the specifications, but embodied in seven claims.

That these machines were run in their various successive stages of improvement in the making of different kinds of buttons, and were finally fully improved, and the perfected machines, or some of them, were run in a complete state till the dissolution of the firm in October, 1880.

The only controversy then as to facts under the issues is *as to the time* when these improvements were thus *all* embodied in practical form, so that the machine was

organized completely as described in the patent in suit, and demonstrated to be useful and valuable.

The defendants claim that this time was prior to July 26, 1877, or more than two years before the application for the patent, which was July 26, 1879; while the complainant contends that it was subsequent to July 26, 1877.

FIRST POINT.

The defendants have failed to establish their first defense, viz., that the invention and improvements named in the patent of 1880 had been in public use in the United States by the Boston Button Company for more than two years before complainants' application for said patent.

The burden of proof is on the defendants to establish this defense by a clear preponderance of proof.

W. & M. Manfg. Co. vs. Hirsch, 10 Biss., 65.
Adams vs. Rathbone, 26 Fed. Rep., 262.
Birdsall vs. McDonald, 1 B. & A., 165.
McCormick vs. Seymour, 2 Blatchf., 256.
Comstock vs. Sandusky Seat Co., 3 B. & A., 188.

And more particularly—

I.

The defendants, to sustain their defense, must prove that the use of these machines was *public*.

But the evidence shows that the use was continuously experimental (p. 23, Int. 48; p. 44, x-Int. 268;

p. 57, Ints. 7 and 8; p. 58, Int. 17), it being important to ascertain how many parts could be improved and work harmoniously together to make a perfect machine; and that complainants' duties in the firm were mainly the improvement and development of the machines (p. 77, x-Int. 159), and that all these improvements were completed and attached to the machines in the factory of the complainants' firm (p. 45, x-Int. 276; p. 61, x-Ints. 57-63); and that these machines were never used except in that factory.

Some sales were indeed made of the product of these machines, but there is no proof as to their amount, and this production and sale was a necessary incident of the experimental trial.

These facts show the use not to have been public.

Elizabeth vs. Pavement Co., 97 U. S., p. 134.
Jennings vs. Price, 15 Blatchf., 42.
Sinclair vs. Backus, 5 Ban. & A., 81.
Smith & Griggs Manfg. Co. vs. Sprague, 12 Fed. Rep., 721.

This last decision was, indeed, overruled by this Court as to all but *three* claims (123 U. S., 249), on the ground that the use of the devices covered by those other claims had been public. But there are these marked distinctions between this case and that: (1) In the case at bar the improvements were important and successful (p. 12, Int. 8; p. 18, Int. 28; p. 57, Ints. 10-12), while in the other case this Court held that they were not; (2) In the case at bar the experiments were continuous, and no long interval elapsed in which no improvement was added (p. 33, x-Int. 160), which this Court found was not the fact in the other case.

II.

To sustain this defense, the defendants must show

that the use was of the perfected machine; of the combined improvements as patented.

Draper vs. Wattles, 3 Ban. & A., 621.
Graham vs. McCormick, 10 Biss., 42.

And in fact the use of the machines without the improvements, covered by claims 1 and 5, was *not* such a use.

III.

Even if the public use of some improvements covered by the patent is established, that will not defeat the validity of claims 1 and 5, unless those specific improvements are proved to have been in public use for two years before the application.

Smith & Griggs Manfg. Co. vs. Sprague, 123 U. S., 249.

But the complainant contends that certainly as to two improvements, viz., those referred to in claims 1 and 5 of the patent (pp. 149–150) the defendants have utterly failed to establish this, and that, on the contrary, the proof is strongly preponderating to the effect that those improvements were not used until after July 26, 1877.

The Court below was not satisfied that there was any clear preponderance of proof on this point in favor of the defendants. The impression made by the evidence on the mind of the Judge is thus stated in his opinion "as to two of them [the improvements mentioned in claims 1 and 5] there is a serious dispute whether they were completed so early as to be forfeited" (Opinion, p. 134). It is not apprehended that this appellate Court will reach any conclusion upon this question of fact more favorable for the defendants than that. But, as the question is open for discussion, the attention of this Court is called to the evidence

upon this controverted point of two years' prior use, which is as follows:

The complainant testifies that the mechanical completion of the machine occurred some time in 1878 (p. 22). He describes the last improvements introduced, and gives dates as late as December, 1877, and January, 1878 (pp. 22, 33, 48, 50).

He is corroborated in this by his son George A. Wade, who was foreman of the Boston Button Company for seventeen years (p. 56) and assisted to build machinery for the different branches of their business, and adjusted all these forty-eight machines, putting them into condition to run after they were built by Newell and Hough & Romney (p. 61), and who testifies that the last improvements were put on in latter part of 1877 or 1878 (p. 58).

And he is further corroborated by the defendant Metcalf, who had been in this business with the complainant since 1868 (p. 90), who must have known well all the incidents connected with these machines, and who is interested to push these dates back as far as possible. He testifies that the machines were "completed and ready for use by or before the close of 1878" (p. 93, Int. 37).

And the Court will note here a circumstance of grave suspiciousness, viz., that near the close of the evidence, when the conflict as to dates had been sharply marked, the defendants produced as a witness their superintendent, Charles H. Haven, one of the chief machinists in their factory, who had been there since 1875, claiming equal authority over the machines with George A. Wade, and yet they carefully refrained from asking him any questions as to the dates when these improvements were placed on the machines (pp. 126–129).

After such evidence from one of themselves, and their failure to question their own superintendent on the subject when actually under examination, it would

seem impossible for the defendants to contend for any earlier date than that sworn to by the complainant.

The complainant is further corroborated by the testimony of Rufus P. Gray, who was in the employ of Hough & Romney, and who testifies that the improved "flexible levers" were made October 11, 1877, and the yielding frame December 3, 1877 (pp. 103–4).

The complainant further testifies that some improvements were added in 1875, some in 1876, some during 1877, and some in 1878 (pp. 33, 48), and were constant, steady experiments (p. 44, Cross-Int. 268), and were attached to test and determine their value as improvements, as experiments to determine their practical working (p. 23, Int. 48), and he states that his experiment ended in 1878 in the embodiment of all these improvements in practical form so that the machine was organized completely as described in the patent in suit (p. 22, Int. 43). That the entire combined improvements were put *on the old altered machines first* and not on the new ones, and the first machine that was perfected with the last of the improvements was after December 3, 1877 (p. 50, Int. 317).

And as Newell & Co. did not complete the delivery of their part of the thirty-four new machines before May 10, 1877; and as only one of the old altered machines was delivered before that date, viz., on April 27th; and only three more before July 27th, viz., on June 21st, leaving eight after that date to be repaired (p. 107); and as Hough & Romney's parts had then to be incorporated with the parts of Newell & Co., and the remainder of the improvements had then to be put on, tried, and finally adjusted (p. 61); and as the whole combined improvements were *first* put on to the *old* machines and not the new ones (p. 50), the general facts support the specific testimony of these witnesses that the completed improvements were not achieved till the last of 1877 or 1878.

The main reliance of the defense is on the testimony of William McCleery. But, as to him, it is observed that he is one of the defendants, and strongly interested in the result; that he is not a mechanic (p. 69, Cross-Int. 74); that he is testifying in 1882 from memory, without written memoranda as to the date of events that happened five or six years previously, and that he is contradicted by his partner and co-defendant Metcalf (p. 90).

It is further to be observed that even he does not state a definite date when the machines were in operation, but says that after the machines came from Newell & Co., the parts made by Leavitt & Co. and the Boston Button Co. had to be put on and adjusted, and that "some machines took considerable time in the adjustment, and others not. I could not state more definitely" (p. 65, Int. 29).

His utter unreliableness as to dates and facts at that remote period is shown by his testifying that "the improvements or appliances under the later patent of Mr. Wade were put upon the twelve old machines prior to May 10, 1877" (p. 64, Int. 17), which is the most important item of his testimony for the defense. But in this he is contradicted by W. W. Wade (p. 50, Int. 317); by George A. Wade (p. 58); by Henrie D. Stone, his own witness (p. 78, Int. 6); by Rufus P. Gray (pp. 103–4), Ints. 9, 15, 16); and by James S. Newell (p. 107, Int. 4); and he is not corroborated by a single witness. If McCleery is then mistaken or untrue in so important a statement, no reliance can be placed upon his testimony in any particular.

Again, McCleery testifies (p. 70–1, Cross-Ints. 87 and 88): "I am sure that when the machines came from J. S. Newell & Co.'s that it [the locking arrangement] was then as it is now." And in this he is contradicted by his own witness and machinist, Lord (p. 89, Cross-Int. 45), as well as by the above-mentioned witnesses.

Again McCleery admits that he could not tell defi-

nitely when the orders for parts of these machines were filled, or which parts were made in the company's factory (p. 74, Cross-ints. 124, 125), and that he cannot tell whether all these patented devices were put on to one of the new machines or on to one of the old ones altered (p. 76, Cross-Int. 150); and yet he dares to testify that the one device wanting on one of the large Medford machines was supplied at Boston in the latter part of 1876 (p. 66, Int. 45), which would make it a perfected machine, wherein he is not only contradicted by all the above-mentioned witnesses, but also again by his own witness and machinist, Lord, who says (p. 88, Cross-Int. 34): "I don't think there was *any* of the machines that ever had *all* the appliances on." And W. W. Wade testifies that many of the improvements covered by the patent of 1880 were not put on this machine before it came to Boston (p. 109, Int. 1), and George A. Wade testifies (p. 60, Cross-Int. 39) that not one of the improvements was fully completed on either machine before they left Medford.

The misleading error in McCleery's mind seems to have been that he thought he could determine the date of the device used, by the kind of button made (p. 66, Ints. 46, 47), while the fact is, all these kinds of buttons had been made prior to 1869 (p. 112, Ints. 24, 25), and McCleery so admits on cross-examination (p. 73, Cross-Int. 113), and they are not dependent upon the patented devices, which only procure quicker and cheaper manufacture of well-known buttons. And this gross error further illustrates the unreliable nature of McCleery's testimony.

The next witness for the defendants was Henrie D. Stone, and the only testimony he gave bearing on this issue of time is, that he as foreman for Newell & Co., made a "spring holder" or "iron lever" like Exhibit Z, and applied it to the thirty-four new machines before they were finished and delivered to the firm, but is

not sure that he applied it to the old machines (pp. 81, 82).

Now this device is the "flexible lever" in claim 1, which the complainant (p. 111, Int. 17), and his son say was not not completed till after October 11, 1877, as we have seen, and in which they are corroborated by the testimony of Rufus P. Gray (pp. 103–4, Ints. 15 and 16), which shows that these levers, as finally perfected, were made in the shop of Hough & Romney, and establishes the date by his memorandum-book, which he produced.

The error in memory of this witness Stone, or his confusion as to facts which had occurred so long previously, is further shown by the testimony of Lord, another of defendant's witnesses, who testifies that the machine that came *first* from Newell & Co., had "the *curved* spring" (p. 89, Cross-Int. 45), while Stone testifies that "the *first ten* machines he sent up had the *straight* spring" (p. 81, Cross-Ints. 30 and 31), and that he *never* made one with a *curved* spring (Cross-Int. 32).

Again, Stone admits that if he made the iron spring "Exhibit Z" it would be extra work and would appear on their books (p. 82, Cross-Int. 43). While not only is there a total failure to prove any such charge, but his employer, Newell, testified that such of the spring holders as they made for the contract machines were made under the contract and were *not* charged as extra work (p. 108, Int. 15).

The complainant in his answers to Ints. 17 and 18, p. 111, explains the changes in devices, the use first of a curved spring, as Lord testifies, then of a straight spring for twetty-four of which Newell charged February 2, 1877 (p. 107), and then the final perfected invention in October, 1877, in its present form of the flexible lever, and this explains the testimony of Stone by showing that he erroneously, although perhaps honestly, confused this flexible lever, which he has since seen

on the machines, with the spring holders somewhat similar, although different, which he had made.

But conclusive proof of the error of Stone is furnished by the fact that the levers finally designed and now in use (Exhibit Z) would not go on to the machines made by Newell & Co., because not made by them, but by Hough & Romney, and with different tools (p. 112, Ints. 22 and 23).

These circumstances and the failure of the defendants to examine Newell on this subject even when produced by the complainant as a witness and the absence of any charge in Newell & Co.'s books, except as to the 24 (p. 107) and the charge on the books of Hough & Romney of October 11, 1877 (pp. 103–4), show that Newell & Co. never made the flexible levers covered by this patent.

The next witness for the defendants is Albert Leavitt, who testifies that he made yielding block frames for the machines prior to November, 1876, identical with the model (p. 84) and referred to in the fifth claim of the patent. But he admits that no one but the complainant gave him orders for this work (p. 86, Cross-Int. 33) and the complainant explicitly contradicts him (p. 114, Ints. 40–42).

Leavitt is also explicitly contradicted by Gray (p. 103, Ints. 6–14) who was employed in the same shop, who personally made under Mr. Wade's orders the *first* yielding frame that was made, December 3d, 1877, who establishes the date by his book which he produced, and who knows and so testifies that no article of that kind had been made in that shop prior to this first one which he made on that date.

Moreover, Leavitt does not produce any book containing charges for this work; he relies merely on memory as to the precise nature of work done by him six years previously, and it is manifest that Mr. Leavitt is mistaken in this particular, and that if he ever made anything of this character it was the old

rigid form which worked until the new device was designed and adopted.

The next witness for defendants is Edward N. Lord, as to whom it is to be noticed that he was in their employ at the time he testified (p. 86, Int. 3).

He testifies that he put on the device known as the yielding block frame and spring soon after he went into the employ of the Button Company, "within three or four months after I should say" (p. 87, Ints. 10–12) and that he went into their employ in September, 1876 (p. 86, Int. 2). But as he continued in their employ continuously then until December, 1878 (Int. 3) and does not refer to any book or contemporaneous incident to fix the date, there is nothing in this evidence to fix the date earlier than December, 1877, against the express testimony of the Wades and Gray and Metcalf. The witness does not even know who made this yielding block (Int. 11 and Cross-Int. 39) although he *supposes* (Int. 11) Mr. Leavitt made it, which looks as if the case had been talked up to this employee in the shape which the defendants would wish to have him remember it.

Again the witness testifies that he put this *first* into one of the old machines (p. 89, Cross-Int. 41). But none of the old ones had been altered prior to April 27, 1877 (p. 107, Int. 7); and moreover the yielding blocks cannot be used without the feeding plates, which were not delivered until January 3, 1878 (p. 114, Ints. 37 and 38).

The witness further testifies that he put the locking arrangement upon some machines, and that some had it on when they came from Newell & Co. (p. 87, Int. 14), and yet he admits that the first machines that came from Newell & Co. had the *curved* spring (p. 89, Cross-Int. 45), and that the same springholder would not do for both the old and new machines (p. 90, Cross-Int. 48); and even he does not fix any date for the

change to the flexible lever; he only says it was "within a short time" (Cross-Int. 46).

He is contradicted by W. W. Wade (p. 113, Int. 31), and by George A. Wade, Gray and Metcalf, as above stated.

He was a mere workman under the employ of the Wades, and his mere memory as to dates after six years would be unreliable if he ventured to give them, but he does not even do that, and such expressions as "within three or four months" or "within a short time" furnish no proof as to precise dates. Whatever blocks or springholders he put on before the latter part of 1877 were undoubtedly the old devices, and he is unable at this distant date to distinguish the exact period when the new devices were first substituted for them.

The only other witness introduced by the defendants upon this issue of time is Henry B. Metcalf, one of the defendants, and his testimony is not at all in their favor, but very strong and decisive against them, for he names the close of 1878 as the date when the machines were perfected (p. 93, Int. 37).

The foregoing is all the evidence for the defense on this issue.

The complainant in reply gave additional testimony personally and introduced also Rufus P. Gray, who testified that he made the first yielding frame on December 3d, 1877, and three more December 15, 1877, fixing the dates by his book, which he produced (p. 103, Ints. 6–10), and that no similar article had been in that shop since it began business in 1875 before this was made (Ints. 13, 14), thereby refuting Leavitt's testimony; and he also testified that it was October 11, 1877, that the work was done on the "flexible levers," and fixes that date also by his book (Ints. 15, 16).

This testimony exactly confirms that of the complainant, and the book entries verify the dates, while

the defendants do not produce any charges or book entries as to either "flexible levers" or "yielding blocks," the charge of Newell & Co. for 24 springholders, February 2, 1877, being evidently for the straight springs and not for the flexible levers (p. 111, Int. 18).

Now, the claim of this patentee is not that all his devices entering into the combination of his machine were designed or applied within two years before his application.

His purpose was to remedy certain defects of the machine of 1869, and to make a more effective and perfect machine. He admits that from 1875, and even before, he made several of the changes and improvements and tried them, and when the thirty-four new machines were built, these improvements, so far as then made, were constructed into them, and the twelve old machines were then altered to embrace them, and changes were made during this construction and alteration and afterwards (p. 33, Cross-Int. 160, and p. 58, Int. 17), and the machines were run in these several trial stages more or less successfully.

But there were defects, and the machine for its present perfection required a good deal more of invention and change and trial after July 26, 1877; and months after this he does claim that the locking arrangement with "flexible lever" was designed and applied, which was a change "of the very first importance, the very virtue of the machine" (p. 12, Int. 8); and thereafter the "yielding block" was devised, an ingenious and valuable device in the combination (p. 18, Int. 28, and p. 57, Ints. 10–12), and there is no contradictory evidence as to the value and importance of these two devices.

And then finally all these devices and improvements were put together and applied and tested till the machine was found reliable and satisfactory in all its complicated and delicate working; and then without unreasonable delay he applied for his patent. And he

does not claim that in the matter of strictly new devices there were more than the two last mentioned within two years of his application. But he does claim that these two were devised and tried, and the combination *finally* completed far within the two years.

And on the evidence he submits that he did not have or use his perfected machine more than two years before his application.

SECOND POINT.

The defendants have failed to establish their second defense, viz., that the defendants still have the right to use these forty-eight machines, because they were constructed by the firm of which the complainant, together with them, was a member, and at the expense of said firm, prior to the complainant's application for a patent—although that firm has been dissolved.

The discussion of this defense requires three lines of investigation:

(1) Whether the defendants have such a right under § 4899 of the Revised Statutes.

(2) Whether the defendants, after dissolution of the firm, retain such a right by reason of their former partnership.

(3) Whether their rights as partners were enlarged by the agreement of dissolution.

It is not understood that any claim is made on behalf of the defendants to any interest in the patent itself. But if such a claim were made it would be clearly untenable.

Hapgood vs. Hewitt, 119 U. S., 227.
McWilliams Co. vs. Blundell, 11 Fed. Rep., 419.
Burr vs. De la Vergne, 102 N. Y., 415.

A.

The R. S., § 4899, is as follows: "Every person who "purchases of the inventor or discoverer, or with his "knowledge and consent constructs any newly-invented "or discovered machine or other patentable article "prior to the application by the inventor or discoverer "for a patent, or who sells or uses one so constructed, "shall have the right to use and vend to others to be "used the specific thing so made or purchased without "liability therefor."

Now, it is to be observed that this section only gives protection to "*the person*" who purchases the machine from the inventor, or who constructs it with his knowledge and consent prior to his application for a patent, and to his vendee of such machine.

The fundamental error that pervades the argument of the defendants' counsel is in its statement that "the machines were constructed and used by the *defendants.*" They were not. They were constructed and used by a firm of which the defendants were two out of its three members, and the Judge below also was under a misapprehension when he wrote: "The section in question "describes in unmistakable language a complete and "perpetual release of the *specific articles* from the "monopoly."

The section does not purport to act *in rem* any further than to give a *license* to the "person" therein de-

scribed, and to his vendee to use and to vend the machine.

McClurg vs. Kingsland, 1 How., 202, which is the leading case in this Court on this subject, holds that the person "mentioned in the section was on the same footing as if he had had from the inventor a special *license* to use his invention."

And that case was so interpreted by this Court in Andrews vs. Hovey, 124 U. S., 703. In this latter case the Court examines all the cases under Section 7 of the Act of 1839, which is similar to this section of the Rev. Stat., and thus states the purport of the section (at p. 702): "The first clause of § 7 of the Act of 1839 relates "to the particular right of a *particular* defendant to "use a particular machine, manufacture or composition "of matter after the grant of the patent, and notwithstanding its grant."

And the Court holds (at pp. 706–8) that a surreptitious obtaining of a machine would not protect its use, thus establishing that no inherent exemption is attached to the machine, but only that a license is granted to its proper owner. The doctrine that the protection given to "the person" under this section is that of an *implied license*, seems to be clearly established.

Kendall vs. Winsor, 21 How., 322.
Bloomer vs. Millinger, 1 Wall., 340.
Black vs. Hubbard, 3 Ban. & A., 39.
Am. Tube Works vs. Bridgew. Iron Co., 26 Fed. Rep., 334.
Chabot vs. Buttonhole Co., 6 Fish., 71.
Herman vs. Herman, 29 Fed. Rep., 92.

But "the person," and the only person who in the present case would be protected by this section is "the firm" which constructed the machines. All the averments of the answer, and also the claim in the contract of dissolution, are based upon money expended by "the firm" for these patented improvements, use of them by "the firm" and membership in "the firm."

There is no pretense of any other or individual right. Now this firm no longer exists, but has been dissolved, and two members of the old firm are no more "the firm" than any mere stranger would be, except for the mere purpose of winding it up.

Or, examining the rights of the defendants as "licensees" under the doctrine of the above cited cases, it is clear that the license was only to "the firm" and not personally to its individual members, "to use these machines, and to vend them to others to be used;" for "the firm" is "the person," and these rights "to use and to vend" are the only rights given by the statute, or that can be properly inferred from the acts of the parties.

Curran vs. Craig, 22 Fed. Rep., 101.
Montross vs. Mabie, 30 Fed. Rep., 237.
Brooks vs. Byam, 2 Story, 525.
Con. Fruit Jar Co. vs. Whitney, 1 B. & A., 356, and cases above cited.

Therefore, the defendants, to derive any protection from this Section 4899, must establish either that as members of the firm they two have *all* the rights after dissolution, which the whole firm previously had, or that the firm has sold to them these machines and the right to use them. And the failure of the defendants to establish either ground of defense will be examined under the next two points.

In examining this defense it must be borne in mind that if this patent had been for a process there might have been force in a claim of a license to use such "process," but when, as in this case, the patent is for "a machine" the implied license is only to "use and vend the specific machines." This distinction is clearly stated in the following cases:

Keller vs. Stolzenbach, 20 Fed. Bep., 49.
Brickill vs. The Mayor, 7 Fed. Rep., 479.
Magoun vs. N. E. Glass Co., 3 B. & A., 114.
Wilkens vs. Spofford, 3 B. & A., 274.

And the Court below recognizes this to be the law (p. 135, lines 16–23).

B.

The defendants, being only two out of three members of the firm, cannot claim the right to continue to use this partnership property as their own, after the dissolution of the firm.

For, on dissolution of a partnership no ownership in its property vests in the individual members except for the purpose of winding up the concern by selling the property and distributing the surplus after payment of debts, and none of the partners can continue to use the partnership property except for that purpose, nor can he have it, or any part of it, divided in specie.

Lindley on Part., pp. 554 and 587 (star paging).
Schouler on Pers. Prop., Vol. 1, §§ 189 and 193.
Bell vs. Morrison, 1 Pet., 351.
Rogers vs. Batcheler, 12 Pet., 221.

In U. S. vs. Hack, 8 Pet., 275, this Court says:

"It is a rule too well settled now to be questioned, "that the interest of each partner in the partnership "property is his share in the surplus after the partner-"ship debts are paid."

And in Bank vs. Carrolton R. R., 11 Wall., 628:

"The property or effects of a partnership belong to the firm, and *not* to the partners."

Locke vs. Lane & Bodley Co., 35 Fed. Rep., 289, holds that even if a firm had a right to use an invention made by one of their employees and patented, this right would *not* pass to a corporation organized by the survivors (two having died), although the surviving partners assigned to it all the property and assets of the firm.

Curran vs. Craig, 22 Fed. Rep., 101, holds that the implied license to a firm by its employee to use kilns or dryhouses involving a patent right, does *not* pass to the receiver of the firm.

And the Court below does not appear to have stated the rule of law correctly when it says (p. 135): "It is admitted that these machines were the property of the firm. It follows that all the members of the firm have an equal proportionate right in them."

On the contrary, the rule is that each member has *not* any proportionate interest in a particular machine, but merely a proportionate interest in the proceeds of its sale among the other assets of the firm.

When this firm was dissolved therefore the defendants' right to use these machines ceased, and they had no authority to continue their use, but only to sell them and to account for the proceeds, which is a very different and much more restricted right. If such a sale had been made they might have become purchasers, as also might the complainant. But no such sale by the firm was ever made, and therefore no question arises as to what right the vendee of the firm would acquire. And the only remaining question is whether under the agreement of dissolution the defendants acquired the right themselves to use these machines. And this is the sole ground of right in the defendants set up in their answer (p. 8, lines 8–16).

C.

The agreement of dissolution did not give to the defendants any right to use these machines (p. 55).

This agreement provides—First, that the firm composed of the defendants and the complainant shall be this day (October 30, 1880) dissolved. Second, the complainant in consideration of $12,000 sells and conveys to the defendants "all his interest in the prop-

erty and assets of every name and nature of said firm," with the following reservation (p. 55):

"And whereas, certain machines, forty-eight in number, with a certain improvement thereon, manufactured by said firm, have been and are now in use by said firm, and the said Metcalf and McCleery *claim the right as members of said firm by virtue of the manufacture and use by said firm, of said machines, with said improvements*, to *continue* such use, and the said Wade reserves the right to *deny such claim.*

Therefore, *nothing* in this sale and conveyance shall operate as an *assent* on the part of said Wade to use said improvements upon said machines, or as granting any rights for such use other than said Metcalf and McCleery now have, whatever they may be, and nothing in this reservation shall be construed to lessen or impair any rights which the said Metcalf and McCleery may have to such use."

The mere sale of an article by the patentee does not necessarily carry with it the license to use, unless such sale is unqualified.

Porter Needle Co. vs. Nat. Needle Co., 17 Fed. Rep., 536.

The use of the article purchased may be restricted or withheld to any extent that the parties to the sale may agree, and the only question is, what is the contract.

Rubber Co. vs. Goodyear, 9 Wall., 788.
Mitchell vs. Hawley, 16 Wall., 544.
Con. Fruit Jar Co. vs. Whitney, 1 B. & A., 356.
Wicke vs. Kleicknecht, 1 B. & A., 608.
Searle vs. Bouton, 20 Blatchf., 426, 429.
Gibbs vs. Hoefner, 22 Blatchf., 36.

In construing this agreement of dissolution it must be read as an entirety, with the reservation clause as a part of and qualifying the granting clause, and it must

also be construed in connection with the circumstances that gave rise to it, viz., the controversy between the parties (Iron & Nail Factory vs. Corning, 14 How., 216). This controversy is recited in the agreement to be "a claim" by Metcalf and McCleery, "as *members* of said firm," "by virtue of the manufacture and use of said machines with said improvements *by said firm*," "to *continue* such use," and a denial by Wade of "*such* claim."

What *continuing* use is here the subject of controversy? Manifestly not a use while the firm existed, but one after its dissolution.

For there was no controversy as to the right of Metcalf and McCleery to use these machines while the firm existed. There had never been any denial by Wade of the right of the defendants while his partners to use these machines. He had assented to it for many years.

But, in the same agreement which declares "the firm is this day dissolved," and among the items of arrangement for the dissolution, appears the claim of Metcalf and McCleery "to *continue* the use of these forty-eight machines," and the denial of "such claim" by Wade. And that is the controversy.

Then follows the provision that, "Therefore, nothing in this sale and conveyance shall operate as an assent on the part of Wade or as granting any rights for such use other than said Metcalf and McCleery now have, whatever they may be." The only rights they had were to use them while partners. They had no right to continue to use them *personally* after the firm was dissolved. And this proviso expressly prevents their acquiring any right under this agreement on the basis of either "assent" or "grant."

The Court held in Hapgood vs. Hewitt, 119 U. S., p. 234, "as to any implied license to the assignor (meaning personal), it could *not* pass to the assignee."

And it surely was not in the contemplation of the

parties that the defendants should acquire any new or enlarged right to use those machines by the agreement, because (1) they expressly agree that they will not; (2) the defendants based their claim to the continuing use exclusively upon the manufacture and use of the machines by "the firm," *not* upon their purchase of the machines.

This contract provides as strongly as language can that the defendants should *not* acquire by means of their purchase of the interest of Wade in these machines, nor by any other item of this agreement, any greater or other rights to use these machines than if such sale or agreement had never been made—*i. e.*, the defendants agreed to stand simply upon their right, as two out of three members of the dissolved firm, to continue the unrestricted use of these machines.

The parties virtually agreed that the defendants took no right to continue to use the improvements applied to the machines if it was in Wade's power to withhold that right at the dissolution of the firm. He certainly had such power under the decisions in Hapgood vs. Hewit; Burr vs. De la Vergne, 102 N. Y., 415, and the other cases above cited. He has exercised this power, and in the agreement denied the claim of the defendants, and refused to do any act, by sale or agreement, that could enlarge their right. The sale itself, made and accepted with this reservation, was no grant or license.

Yet the defendants now seek to put upon this agreement the monstrous construction, that, although they agreed, and all the parties to it agreed, that it should not enlarge their right, still that, in spite thereof, it does enlarge it, and does grant to them a right that otherwise they would not have!

The opinion of the Court below states that the complainant's "reservation of an exclusive right in an important part of the machines was useless and void * * * by reason of his being only a part owner he

could not have this exclusive right" (p. 135, at foot). But the defendants did not own two-thirds or three-quarters of these machines (see Point B of Brief, *supra*); all they owned was the right to their proportion of the surplus of the proceeds of the firm's assets after its debts were paid. Moreover, the complainant did have an exclusive right to his patent, except so far as he had by implication licensed the firm to construct and use and vend these machines. And the opinion does not cite any authority or legal principle that would restrict these partners from agreeing that if the individual rights of two ceased at dissolution, then that the sale or agreement should not extend those rights.

The opinion proceeds to state: "Indeed, I understand the contract of dissolution to agree that if the defendants, while remaining members of the firm, might use the improvements, they should have the right to continue the use notwithstanding the dissolution. The question left open was whether they ever had any such right. The plaintiff admitted in that contract, very properly, as I think, that whatever right the firm had would survive to the defendants."

The Court seems in this to have wholly misconceived the terms and the purport of the contract of dissolution. It is difficult to comprehend how it could have drawn such inferences from this agreement. Even the brief of the defendants' counsel did not venture to suggest such a construction of it.

That contract surely did *not* agree that if the defendants had the right to use as members of the firm, they should have the right to continue notwithstanding the dissolution. This was expressly denied and refused by Wade.

No such question was left open as "whether they ever had any such right," for no such question was ever raised, Wade always admitting that while members of the firm they had such right.

No admission by Wade can be found in the agree-

ment "that whatever right the firm had would survive to the defendants." But he explicitly denied such claim when made by them. And the Court below has fallen into the error of holding that the complainant conceded and admitted that very point which he made the basis of his controversy, and so stated in the agreement.

There can be no doubt that the parties had a right to insert such a reservation as was contained in this contract. They could make any agreement which did not conflict with public policy, as this did not; and especially regarding any right to use under a license which this is, as above shown (p. 20 of Brief).

The mere fact that $12,000 was paid by the defendants does not enlarge the terms of the agreement, nor restrict the reservation, for there is no evidence to show what the price might have been without the reservation, possibly $50,000 or $100,000.

And as it seems, then, to be clear that the defendants, merely as partners, had no right to demand an interest in the patent, or to continue the use of the machines after dissolution, and that no enlargement of their right was given by the agreement of dissolution, but was expressly withheld; it necessarily results that the defendants have not, in any way, acquired by this instrument any right to use these improvements upon the forty-eight machines.

But it is to be observed that the agreement of dissolution further provided that as to two prior patents, therein specifically named, each party should have the right to manufacture and use machines constructed thereunder, and the evidence shows that the machines complained of, or some of them, were originally constructed under one of those prior patents; so that it would be possible for the defendants now to remove from all the machines the specific improvements patented in the later patent here in suit, and retaining

the features covered by the prior patent, to make them still usefully operative machines, although not so efficient as they now are with the latter improvements added.

The practical question is, therefore, whether the defendants must content themselves with their rights under the two prior patents of 1869, in which they have a definitely assigned interest, or whether they may also so far as these forty-eight machines are concerned enjoy the benefits of the improvements secured by the later patent of 1880, here in suit.

The defendants now claim the whole benefit, for all time, in what the complainant only conceded a partial benefit for a limited time.

The complainant used the strongest possible language to terminate the license when the partnership was dissolved. To sustain their defense the defendants must satisfy the Court that, as matter of law, one partner cannot by agreement with his copartners terminate or restrict a license, and resume the exclusive control of a patent of which he is the sole owner.

THIRD POINT.

On behalf of the complainant it is, therefore, submitted that the defendants ought upon the dissolution of the firm to have removed the patented improvements, and to have reduced the machines to the condition provided for in the earlier patents of 1869, or that at the least they should have removed all such improvements as are covered by claims 1 and 5 of

the patent of 1880; and that by reason of their persistence in using their improvements, secured by the later patent of 1880 here in suit, they ought to be adjudged infringers upon the rights of the complainant, and to account to him for profits and damages, and to be enjoined, as prayed in the bill of complaint; and that the decree of the Court below should be reversed with costs.

GEO. F. BETTS,
Counsel for Appellant.

SUPREME COURT U.S.
FILED
JAN 8 1889
JAMES H. McKENNEY,
CLERK

SUPREME COURT OF THE UNITED STATES,

OCTOBER TERM, 1888.

No. 163.

WILLIAM W. WADE

v.

HENRY B. METCALF AND WILLIAM McCLEERY.

BRIEF FOR DEFENDANTS.

EDWARD W. HUTCHINS,
HENRY WHEELER,
of Counsel.

ADDISON C. GETCHELL, PRINTER, 55 OLIVER ST., BOSTON.

Supreme Court of the United States.

No. 163.

WILLIAM W. WADE

v.

HENRY B. METCALF AND WILLIAM MCCLEERY.

BRIEF FOR THE DEFENDANTS.

This is a suit in equity, in which the plaintiff seeks to restrain the defendants from infringing his rights in Letters Patent of the United States, No. 228,233, issued to the plaintiff June 1, 1880, for improvements in a machine for making covered buttons. The case was heard upon the bill, answer, replication, and testimony, by the Circuit Court for the District of Massachusetts, by which a decree was made dismissing the bill with costs. The opinion of the Court (LOWELL, J.) may be found on page 134 of the Record, and is also reported in

Wade v. *Metcalf*, 16 Fed. Rep. 130.

From this decree the plaintiff has appealed to this Court.

The complaint is that the defendants, without the plaintiff's consent, are, and since October 30, 1880, have been, using forty-eight button machines, which in their construction embody the improvements covered by the plaintiff's patent.

The defence is:

First. The plaintiff's patent is void because the invention

covered by it had been in public use more than two years before the application for the patent.

Second. The defendants have a right under United States Revised Statutes, section 4899, to use the forty-eight machines in question, because they were constructed and used by them with the plaintiff's knowledge and consent before his application for a patent.

Third. That at the time these improvements were invented by the plaintiff he and the defendants were co-partners, and as these forty-eight machines with the patented improvements were built by the firm, all the members of the firm had an equal right in them; and as the plaintiff at the time of dissolution released all his interest in the assets, these specific machines with the right to use them passed to the defendants.

The history of the machines, and the relations of the parties, as it appears from the evidence, are as follows: —

In 1868 the plaintiff and the defendant Metcalf were associated together with certain other persons as stockholders in the Boston Button Company, a corporation organized under the laws of Massachusetts for the business of manufacturing and selling buttons. The corporation was dissolved about the end of the year 1868, and a partnership was formed for the purpose of carrying on the business, consisting of the plaintiff, Wade, the defendant Metcalf, and three other persons whose interests were subsequently acquired by the defendant Metcalf, so that in January, 1875, the partnership consisted of Wade and Metcalf alone, under the style of the Boston Button Company. The defendant McCleery, in January, 1875, purchased a portion of the respective interests of the plaintiff and the defendant Metcalf, and from 1875 until October 30, 1880, the partnership con-

sisted of the three parties to this suit, Metcalf owning a half interest, and Wade and McCleery one quarter each.

The old partnership which succeeded the corporation in 1868 had twelve button-making machines, and in 1869, Letters Patent were issued to the defendant Wade covering these twelve machines.

Wade, p. 10, int. 5.

An interest in this old patent was assigned to the defendants, and no claim is made by the plaintiff in respect to it.

The plaintiff's part in the business was to improve and develop the machinery: for this he received a salary of fifteen hundred dollars above his interests in the profits.

Wade, p. 44, int. 272.
McCleery, p. 66, int. 33.
Metcalf, p. 92, int. 26.

The defendant McCleery had also a salary of fifteen hundred dollars for general superintendence of the business, and the defendant Metcalf a salary of three hundred dollars for lending occasional assistance in financial matters.

McCleery, p. 66, int. 44.

Above these respective salaries, each partner had his interest in the profits, viz., Metcalf one half, McCleery and Wade one quarter each. The firm had its factory first at Winchester, then at Medford, and in February, 1876, moved to Boston.

McCleery, p. 63, int. 5.

While at Medford, two new button machines were built by the firm larger than the twelve old ones covered by the patent of 1869, having certain improved devices, the inven-

tion of the plaintiff, attached to them, and after the removal to Boston in 1876, thirty-four more large machines were built, and the twelve old ones were altered over, making in all forty-eight machines owned by the firm, and which are the machines which form the subject of the present suit.

Metcalf, p. 91, ints. 15–24.
Wade, p. 33, int. 161.
Wade, p. 34, ints. 164, 165.
McCleery, p. 64, ints. 13–19.

The patent in suit covers seven different claims for improvements on the original machine covered by the patent of 1869, invented by the plaintiff during the continuance of the partnership.

At the time of the dissolution of the firm, which took place October 30, 1880, some of these improvements had been applied to all the forty-eight machines owned by the partnership, and others, which consisted of adjustable and interchangeable appliances, only used when certain kinds of buttons were being made, had been applied to only some of them.

Wade, p. 34, ints. 166–173.
McCleery, p. 66, int. 41.

These improvements were made by the plaintiff while a partner with the defendants, receiving a special salary above his interest in the profits for developing and improving the machinery.

Wade, p. 44, int. 272.
McCleery, p. 66, int. 33.
McCleery, pp. 76, 77, ints. 155–164.
Metcalf, p. 92, int. 26.
McCleery, p. 130, int. 11.

The expense of making them was borne by the firm, and they were applied to the firm's machines, and worked for the firm's benefit, with the plaintiff's consent.

Wade, p. 23, ints. 48–50.

July 26, 1879, the plaintiff, without the knowledge of his co-partners, filed his application for a patent on these improved devices, and on that applieation the patent in suit was granted. The first the defendants knew of the patent was nearly a year after the application had been made, and just before the patent was issued.

McCleery, p. 66, ints. 34–38.
Metcalf, p. 92, ints. 27–30.

Soon after came the dissolution by the agreement of October 30, 1880, set forth on page 55, containing the following provisions: —

"*Second.* The said William W. Wade, in consideration of the payment to him of the sum of twelve thousand dollars by the said Metcalf and McCleery, receipt of which is hereby acknowledged, hereby sells and conveys to the said Metcalf and McCleery all his interest in the property and assets, of every name and nature, of said firm of the Boston Button Company, together with the good-will of the same, with authority to use his name, if necessary, in the premises, saving him harmless from all cost in the same.

"And whereas certain machines, forty-eight in number, with a certain improvement thereon, manufactured by said firm, have been and are now in use by said firm, and the said Metealf and McCleery claim the right as members of said firm, by virtue of the manufacture and use by said firm of said machines with said improvements, to continue such

use, and the said Wade reserves the right to deny such claim:

"Therefore nothing in this sale and conveyance shall operate as an assent on the part of said Wade to the right to use said improvements on said machines, or as granting any rights for such use other than said Metcalf and McCleery now have, whatever they may be; and nothing in this reservation shall be construed to lessen or impair any rights which the said Metcalf and McCleery may have to such use."

"Exhibit Dissolution Contract," Record, p. 55.

After the dissolution, the defendants, Metcalf and McCleery, continued as co-partners to manufacture buttons and to use the forty-eight machines, with the improvements upon them, and on December 3, 1880, this bill was filed.

I.

The Letters Patent No. 228,233 *are invalid, because the invention and improvements therein named have been in public use more than two years before the application.*

It appears from the testimony, and is, we understand, admitted by the plaintiff, that the greater part of the improvements were in use by the firm more than two years before the application for the patent; but it is claimed by the plaintiff that two of them were not so used until within two years before the application, and that the prior use without these two last devices was not a public use in the sense of the statute, but was an experimental use, and, provided that he can show that these two last devices were not used more than two years before his application, his patent is valid for the improvements used before, as well as those used within the

two years. In reply to this claim of the plaintiff, we shall show, first, that all the improvements were applied to some of the forty-eight machines more than two years before the application, and that the patent is therefore totally void; and, secondly, that even if the plaintiff were right in his contention that two of the improvements were not invented or used until less than two years before the application for the patent, the patent is void as to all except those two improvements last used.

The forty-eight machines now used by the defendants, and acquired by them at the dissolution of the partnership with the plaintiff, are built under the design made by the plaintiff prior to 1868, and for which he obtained his patent of 1869, rights in which were afterwards assigned to the defendants, save that in certain particulars the arrangement of the mechanism has been altered or appliances added for the purpose of making the machine work with more accuracy, with less liability to breakage, and produce certain kinds of buttons that could not be made as profitably without them.

The machine is a complicated piece of mechanism, but its general features can be readily understood by reference to the model and the specifications of the patent.

Record, p. 140.

It is constructed of iron, and consists of a circular moveable plate resting upon a table, with two uprights running up through the table, and sustaining two pistons, which are furnished with dies, and co-operate with bed dies in the circular plate to form the buttons.

Figure 1 of the plate opposite page 140 is a general view of the machine. A is the table, B and B′ are the two uprights, E and E′ are the two pistons, A′ is the circular plate, which is also shown in fig. 2.

The circular plate contains twelve bed dies placed in a circle at equal distances apart, near the periphery of the plate, as shown in fig. 2. Of these dies, each alternate one is alike for making the upper part or front of the button, and the others are alike for making the back of the button.

It is operated by a shaft under the table, which revolves the circular plate and raises and lowers the two pistons, bringing them to bear upon the dies in the plate.

A simple covered button, such as is worn on a man's coat, is formed of a cloth or silk front, which covers a circular piece of metal and is united to the back, which is formed of a circular piece of metal with a hole in it, through which projects a piece of canvas, which forms the shank by which the button is sewed on to the coat; between the two parts is a pasteboard filling.

These various parts of the button are cut of the proper form and size by other machines, the office of this machine being merely to unite them into the finished button.

To make a button on the machine, the canvas and the metal back are placed in one of the dies marked a^1, and as the plate revolves this is brought under piston E′, — the left-hand piston of fig. 1, — which descends and punches the canvas through the hole in the metallic back. As the plate revolves, and before the die a^1, in which the back has thus been formed, comes under piston E, the right-hand piston of fig. 1, the covering and metal forming the front of the button are placed in the die a^2, next to a^1, in which the back has been formed, and ahead of it in the revolution of the plate from left to right; so that a^2, containing the front parts of the button, comes under piston E first. This piston descends, and, putting the parts forming the front together, lifts them from off the die a^2, and holds them suspended until a^1 comes along in the revolution of the plate, when

piston E again descends, carrying the front of the button down upon the back of the button in a^1, and, uniting the two, leaving the finished button upon die a^1, when the piston reascends. The pasteboard filling is put upon the back in die a^1 after die a^1 has been under piston E′, and before it comes under piston E.

These general features of the machine were covered by the old patent of 1869.

The new patent of 1880, now in suit, consists of various improvements upon this machine, which make it more effective and economical, but without them it is still a practical working machine, and was used as such by the plaintiff for many years before these improvements were invented.

They are seven in number.

Claim 1:

"The combination of the detent or pawl d, upright shaft d^4, lever d^2, flexible lever d^1, vibrating plate b^1, provided with projection b^4 and depression b^3, link c, sliding bar c^1, pitman c^2, strap c^5, and compound eccentric c^3c^4."

The plaintiff describes this device in answer to interrogatories 6 to 13.

Deposition of *Wade*, pp. 11–13.

As the pistons descend and engage with the dies in the revolving plate, the plate comes to a momentary rest, and the purpose of this device is to insure its coming to rest in exactly the right place so that the pistons will descend upon the centre of the dies. To effect this, notches are cut at regular intervals in the outer circumference of the plate, and the piece of iron called the detent is brought to bear upon the plate and engage with the notches in succession, and at the proper time holds the plate fast while the pistons are

engaged with the dies in the plate, releasing it when the pistons ascend.

It is admitted that when the thirty-six new and larger machines were built they had all the parts comprised in claim 1 of the patent, with one exception, *i.e.*, the flexible lever d^1, and all of these were built before May 10, 1877.

Stone, p. 78, int 5.
Stone, p. 79, ints. 10–13.
McCleery, p. 70, int. 85.

The patent is clearly void as to all these parts of the claim.

Before the flexible lever d^1 was adopted there was used in its place at one time a straight, and at another time a curved, spring attached rigidly to that portion of the lever d^6 (fig. 31) where the flexible lever d^1 is now applied, and extending to the lug b^4 on the vibrating plate b^1, and when by the motion of the vibrating plate the lug b^4 was brought against the spring the spring would be thrown out and would move the detent against the plate A′ and into the notch. If any obstruction happened to be in the way owing to the notch getting filled with dirt or other obstacle, the pressure upon the straight or curved spring would be likely to break it, and the new device of a jointed lever with the spiral spring d^3 saves this breakage, as this spiral spring is sufficiently firm to throw the detent d into the notch if all is clear, and sufficiently yielding to give way without breaking in case there is any obstruction to the free entry of the detent into the notch. The machine is a successfully operating machine with the rigidly attached spring, and was so used by the firm before the invention of the flexible lever and more than two years before the application for the patent. By the

attachment of the flexible lever d^1 it is less liable to get out of order.

Specification, p. 144, last paragraph.

The evidence as to when this flexible lever was first used is conflicting. The date of the application for the patent is July 26, 1879, so that the question for discussion is whether it was first used before or after July 26, 1877. The plaintiff sets the date when it was first used as October 11, 1877.

Int. 17. Henry D. Stone has testified that he, as foreman for Newell & Co., made the jointed or flexible lever arrangement, called by him spring holders: have you any reply?

Ans. He is entirely mistaken in relation to that; the flexible lever or spring holder was not made even as an experiment until August or September, 1877; it was made by myself, and I put it on and adjusted it, worked it for a time, and then became satisfied it was the best thing yet made, and ordered some more from Hough & Rumney. They were built and delivered to us on October 11, 1877, as shown by their books.

Wade, p. 111, int. 17.

Wade, p. 113, int. 31, to the same effect.

One Gray, a man in the employ of Hough & Rumney, testifies as follows: —

Int. 15. Will you turn in your memorandum book to October 11, 1877, and see if anything is charged to the Boston Button Company, and if so what as work done in the shop?

Ans. I have a charge here of forty-one and a half hours' labor on levers, set-screws, wire, and steel.

Int. 16. Will you examine that article marked "Exhibit Z," and state whether the levers charged were like the exhibit shown you?

Ans. They were like it.

Gray, p. 103, int. 15, 16.

This testimony of Gray's was given on November 13, 1882, five years after the date of the entry.

This is substantially all the evidence of the plaintiff tending to show when this flexible lever was first introduced.

Wade nowhere pretends to have any means of fixing the date of the invention of this contrivance, apart from this entry in Hough & Rumney's book: "Forty-one and one half hours' labor on levers, set-screws, wire, and steel."

Now practically all the machinist work that was done for the firm from 1875 to the time of dissolution, save such things as they could do in their own factory, were done either by the firm of James S. Newell & Co. or the firm of A. Leavitt & Co., and its successors, Hough & Rumney.

Wade, p. 49, int. 302.
G. A. Wade, p. 60, ints. 50–53.
A. Leavitt, p. 83, ints. 2, 3.
A. Leavitt, p. 84, ints. 4–8.
Gray, p. 102, ints. 2–5.

Besides these 48 button-covering machines they had other machinery for preparing the parts of the buttons.

Wade, p. 44, int. 272.

So that the amount of work done by these firms of machinists for the Boston Button Company must have been very considerable, and when, five years after, an entry of such a general nature as that above quoted is made, a man in the shop is produced who testifies just what kind of a lever was made and charged for by that entry, his testimony is to be received with great caution, especially when it appears that at the time the evidence was taken the firm of Hough & Rumney was interested in business with the plaintiff.

Wade, p. 40, int. 233.

The evidence of the defendants, on the other hand, that this flexible lever was used by the firm before July 26, 1877, is full and clear.

As we have already explained, all the machines, with the exception of the twelve old ones built prior to 1869, were built with the improved arrangement for rotating and locking the die-plate, in all respects as described in claim 1 of the patent in suit, except the flexible lever d^1, in place of which there was used a spring rigidly attached to the offset d^6.

Two of the new machines had been made at Medford before the removal to Boston in February, 1876.

McCleery, p. 64, ints. 13–16.

And thirty-four others were made by J. S. Newell & Co., and delivered in instalments, as follows: —

1876.	September 11	3
1876.	September 25	6
1876.	October 16	1
1876.	December 12	11
1877.	March 29	7
1877.	May 10	6

Stone, p. 78, int. 5.

After the thirty-four new machines were done, the twelve old ones were altered over and had the new devices put upon them.

Stone, p. 78, ints. 6, 7.

Stone, the foreman of Newell's machine shop, testifies that those of the new machines delivered before December 21, 1876, had the lever with the straight spring (Exhibit X),

and during the construction of the later ones on or about December 21, 1876, the first flexible lever d^1, or spring holder, as he calls it (Exhibit Z), was introduded and applied.

Cross-Int. 30. Will you look at what is called the lever, and which is marked by the commissioner "Exhibit X, W. W.," and state whether that was the lever that you made and applied to those thirty-four machines and the altered ones, or whether the lever which you did make, instead of having the bent or curved brass spring, as shown in this exhibit, had a straight spring in lieu of the curved one?

Ans. My recollection is that I started to build these levers with a straight spring for the thirty-four machines, but was ordered to stop and substitute another one, but it was not the one with the curved spring.

Cross-Int. 31. On your best recollection, did not those machines go up to the button factory with that straight spring lever?

Ans. Ten of them did, and we changed them up there.

Cross-Int. 32. Have you any recollection of making or applying the lever with the curved spring just exhibited?

Ans. No, sir, I never made a lever with a curved spring.

Cross-Int. 33. If, as you say, you altered the lever at the factory, what alteration did you make, or to what?

Ans. I substituted a lever similar to one marked d^1, d^2, d^3, d^6.

Cross-Int. 34. Will you look at the iron casting marked "Exhibit Z, W.W.," and say whether that is the one to which you refer?

Ans. Yes, sir, that is the one, though the first one I made was of brass; though the iron one was subsequently adopted.

Cross-Int. 35. Can you tell how much of that was originally of brass?

Ans. According to my recollection, it was only to try the experiment, and the piece marked d^1 in the model was the only part in brass.

Cross-Int. 36. Will you state when you first received the pattern and obtained the casting for the iron lever just produced?

Ans. Somewhere near December 21, 1876.

Cross-Int. 37. Now state whether you applied that iron lever to all the thirty-four new machines; and, if so, when did you apply it to them all?

Ans. During the building of the second and third lots, those belonging to those lots were applied, and also to those already delivered; men were sent up there for that, and applied at their shops.

Cross-Int. 38. Will you also state when, if at all, you applied that iron lever to the twelve old machines which you altered over, as you say?

Ans. It would be likely to be applied while we were repairing and altering over those machines. I can't tell the exact date. I could get it by referring to the books.

Cross-Int. 39. If it shall appear that the charge for making those iron levers appears on the books of your firm as made in October, 1877, would that entry control your memory as to time?

Ans. I don't think it would, for I don't think that charge can be there, according to my recollection, unless it be some special lot that was made.

Cross-Int. 40. Are you sure that your firm or you made those iron levers exhibited at all?

Ans. I am sure they were made in our shop by the firm I work for.

Cross-Int. 41. If so, how will the entry be made? What sort of charge will it be?

Ans. I gave them the name of spring holders; probably the charge will be to the Boston Button Company of twelve spring holders, or whatever number they may be.

Cross-Int. 42. Would not the phrase "spring holder" apply equally well to Exhibit X or a straight spring lever?

Ans. I should say it might possibly be called a spring holder, but at the same time I shouldn't have made any separate entry of this on our books, because the straight spring was part of our contract.

Cross-Int. 43. But if you made the iron spring marked "Exhibit Z," that would be extra work and would appear?

Ans. Yes, sir.

Cross-Int. 44. Do you feel sure that you applied that iron spring to all the new and altered machines that went through your shop?

Ans. I feel pretty sure it was applied to all the new ma-

chines; as to the old ones, I am not so sure; but in making changes I should have been likely to have done it.

Stone, p. 81, cross-ints. 30–44.

J. S. Newell testifies that twenty-four spring holders were completed February 2, 1877, and are so entered on his books, and that twelve of them were charged to the Boston Button Company on February 6, 1877:

Int. 8. Will you turn to your books of February 6, 1877, and see if you find a charge to the Boston Button Company for levers or spring holders?

Ans. I find an entry of twenty-four spring holders completed February 2, 1877, twelve of which were placed on machines which we made by contract, twelve of which were charged to the Boston Button Company on February 6, 1877.

Int. 9. Are we to understand that you made and delivered on this date of February 2, 1877, twenty-four levers or spring holders?

Ans. No, sir.

Int. 10. How many did you make and deliver at that time?

Ans. We completed twenty-four, twelve of which were placed on the machines which we made by contract, and twelve of which were charged to the Boston Button Company on February 6, 1877.

Int. 11. Do you mean to say that the levers or spring holders that you put on to the twelve machines that had been made by contract, as you say, were the same as those you completed and delivered at this date of February 2, 1887?

Ans. I do.

Int. 12. Do you mean to say that the whole twenty-four spring holders that you made first and last for the Boston Button Company were of the same kind or character, or did you make twelve of one kind under your contract, and then make twenty-four of another kind, twelve of which were substituted for the first twelve?

Ans. I mean to say that the twenty-four spring holders referred to were all alike, and twelve of them were used upon the machines we had made or were making, and, when made, twelve were delivered to the Boston Button Company.

Int. 13. Will you say that the twelve spring holders made for the first twelve machines delivered by you were the same in kind as the twenty-four now referred to?

Ans. I cannot say.

Int. 14. If you had made twelve, and charged for them under your contract price, would you charge for twelve different ones without any allowance if the old ones were returned to you?

[*Objected to as incompetent.*]

Ans. I do not know.

Int. 15. If you made twenty-four, and delivered them February 2, why do you charge for only twelve?

Ans. Because twelve of them were used on machines made by contract, as stated.

Int. 16. If you made and charged for twelve, under your contract, and they had been delivered, why do you now make twenty-four?

Ans. I do not make them now. I charge for them now as completed. The labor was commenced on previous year on the twenty-four; they were carried forward as one lot. The final work on twelve was completed as they were needed; on the remaining twelve, on this February 2, 1877.

Int. 17. Are not your charges for twelve machines entered in full as you delivered the machines?

Ans. They are.

Newell, p. 107, ints. 8–17.

Edward N. Lord, a machinist in the employ of the Boston Button Company, applied these flexible levers d^1 or spring holders to the machines first received from Newell & Co., which were originally fitted with the spring Exhibit X, and he corroborates Newell and Stone, that the change was made while Newell & Co. were building and delivering the machines; that is, prior to May 10, 1877.

Int. 13. Please state whether the locking arrangement used in the various machines of the Boston Button Company is the same as that upon that model.

Ans. It is.

Int. 14. Did you put the locking arrangement upon all of

the machines, or did some of them have it on when they came from J. S. Newell & Co.?

Ans. I put it on some of them; some had it on when they came from J. S. Newell & Co.

Lord, p. 87, ints. 13, 14.

Cross-Int. 43. Have you any recollection of any experiments or other form of locking arrangement other than the one as shown you?

Ans. Yes, sir.

Cross-Int. 44. Whether the first form that you recollect was like "Exhibit X," shown you, but with a straight spring?

Ans. I have seen them with a straight spring and a curved one; don't know which I saw first.

Cross-Int. 45. Can you tell which form of spring was on the machine that first came from Newell & Co.?

Ans. The curved spring.

Cross-Int. 46. How long were the machines run, or any of them, with the curved spring?

Ans. Right off. Within a short time we changed to the form now on the model.

Cross-Int. 47. Can you tell whether that change was first applied to the new or the altered old machines?

Ans. On the new machines, I think.

Lord, p. 89, cross-ints. 43–47.

Assuming that Gray's evidence that the charge in Hough & Rumney's book of "Forty-one and one half hours' labor on levers, set-screws, wire, and steel, on October 11, 1877," was for these flexible levers, and not for some other work, it might well be that the levers made by Hough & Rumney were for use on the twelve old machines which were altered over by Newell & Co. after the new ones were completed.

Stone, p. 78, int. 6.

This would explain the testimony given by the plaintiff,

that the levers made by Hough & Rumney would not go on to the arbors which had been made by Newell & Co.

Wade, p. 112, int. 22.

Claim 2:

"The compound partible die, which is applied to piston E, for the purpose of making more efficiently compound or fancy buttons, viz., those of which the front is composed of different pieces of silk, instead of one piece as in the simple button like those used for men's coats."

The only evidence as to the time when this was used is in the evidence of the plaintiff on pages 32, 33, and 47, and in the evidence of the defendant McCleery, on pages 64, 71, 72, and 73.

The plaintiff testifies that he does not think this die was on the machines while the firm was at Medford.

Wade, p. 47, ints. 288, 289.

That is to say, not on the machines before February, 1876; but he does not state when it was put on, and does not state whether it was put on before or after July 26, 1877, viz., two years before the application for the patent.

On the other hand, McCleery testifies positively that this kind of die was used in 1876, and prior to January, 1876, and that in May and June, 1876, they made buttons with this die, and had large orders for them.

McCleery, p. 70, ints. 81, 82; pp. 72, 73, ints. 109–112.

There is nothing in the evidence to contradict this evidence of McCleery.

Claim 3:

This is called the sleeve-stripping device, an arrangement shown in fig. 33, and being the parts marked i, i^1, i^2, i^3, i^4, i^5, i^6 and was used to raise the outer part of the die or die sleeve attached to piston E, before the inner part of the die was raised, as otherwise when buttons with thick edges were made they would be apt to be left clinging to the die attached to piston E instead of being left in the bed die a^1 when completed.

The plaintiff admits that this contrivance was used by the firm prior to the removal from Medford, viz., prior to February, 1876, more than three years before the application for the patent.

Wade, p. 47, int. 290.

Also see —

McCleery, p. 67, int. 49.
Stone, p. 80, int. 27.

Claim 4:

Sliding feeding-plates, so called. This device is only used for making certain kinds of buttons, *i.e.*, those with a canvas or cloth back instead of the metallic back. There was not a complete set of forty-eight of them, one for each machine, but a few were made adjustable and interchangeable so that they could be applied to any one of the forty-eight machines while that kind of a button was being made.

Wade, p. 34, ints. 168–170.
Specification, p. 148.

In making buttons of this kind the pasteboard filling has to be united with the back of the button by the descent of piston E′, and it is necessary that this filling should be held exactly over the centre of bed die a^1 while piston E′ descends. The old means of doing this was by putting the

filling in a ring which was placed by hand over the bed die a^1 before the descent of the piston. If the rings were not put on exactly right, more or less damage would be caused to the machine. The present device is designed to feed this filling to the dies automatically, and is shown in figs. 3, 18, and 19, and is described in the evidence of the plaintiff.

Wade, p. 17, ints. 25, 26, and in the specification, pp. 146, 148.

The parts are marked q, m, m^1, and o.

It consists of a circular plate, q, of the same size as the revolving plate A′ (fig. 2) already described. In this plate q are cut holes corresponding to the dies a^1 and a^2 in the plate A′. Upon this plate q are placed radially about the centre, six sliding plates, m, each containing a hole in its outer end, and fitted with a spring so that in their natural position the plates are drawn close to the centre and away from the holes in the plate q.

When this contrivance is to be used it is put on the machine over the plate A′, with which it revolves, so that the outer ends of the six sliding plates come against the dies a^1 which co-operate with piston E′ to make the back of the button. In the hole at the ends of each sliding plate is placed the pasteboard filling. On the piston E′ (see fig. 4) is a roller, p, which, as the piston descends, comes in contact with the lever n, which is attached to the upright B′; by the pressure of the roller as the piston descends the upper part of lever n is driven out and the lower end inwards towards the die. As this lower end swings in, it engages with a pin, m^1, in the sliding plate (see figs. 18 and 19), causing the plate to move far enough to carry the hole containing the pasteboard filling exactly under the piston; by the descent of the piston the filling is driven through the

plate into the bed die, and when the piston reascends, the lever *n* is released and swings outward, and the sliding plate, by means of a spring underneath it, returns to its place away from the die.

It is clear from the evidence that these plates were used at Medford upon the smaller machines more than three years before the application for the patent. They were afterwards applied to the larger machines, but no difference in form or construction is pointed out between these plates as applied to the larger and the smaller machines. The plaintiff's own testimony is clear that they were so used,

Wade, p. 47, ints. 287, 291,

and there is no testimony that they were not.

McCleery testifies (p. 71, ans. to cross-int. 94) that these were used before the firm left Medford, which was in February, 1876, and that automatic feeding plates were enumerated in certain inventories of the property of the firm made in 1873 and 1874, and that the feeding plates mentioned in the inventories were the same as those described in this claim of the patent in suit.

McCleery, p. 67, int. 49.

Leavitt testifies that he made plates of this kind, and this must have been before November, 1886, because he then left the business.

Leavitt, p. 84, ints. 4–6.

Claim 5:

This is called the yielding block and frame, and is used in connection with the lever *n*, which works the sliding plates *m*, and is attached to the lever *n* to prevent breakage in case of any obstruction to the free movement of the sliding plates.

It is shown in fig. 4, and marked n^1 and n^2, and is described by the plaintiff.

Wade, p. 18, int. 28.

Before the yielding block was invented, the lever n was attached directly to the upright B′. In the event of any obstruction preventing the sliding plate from moving forward, the lever n would break. To prevent such accidents, the lever n is now attached to a block, n^1, enclosed in a frame which is fastened to the upright B′, and this block n^1 is held in position by the spiral spring n^2. This spring is sufficiently strong to hold the block steady and enable the lever n to move the sliding plate m under ordinary circumstances, but if there is any obstruction in the way of the plate, the block n^1 and the lever n will yield against the spring in the frame as the roller p descends, and the lower end will not be driven inwards towards the die.

This yielding block, frame, and spring is claimed by the plaintiff to have been the last invented of the improvements covered by the patent in suit, and that it was not made until December 3, 1877, and that he knows this because that is the date charged in the books of the firm that made them. Without this entry he has no means of fixing the date.

Cross-Int. 160. Have you any means of stating when those improvements were added to the two machines?

Ans. I should have to ask which two machines. [*Counsel states he refers to the two at Medford.*] Every machine that was built prior to leaving Medford was altered in some way after we went to Boston, so that not a machine remains to-day as when we left Medford. I can only say a large portion of the machines were built after going to Boston; the old machines which were built prior were altered over to correspond to the newer or later ones. [*Question repeated.*] I can say that certain improvements were added sometime during 1875, some during 1876, and some during 1877, and some during 1878. I have no means, except from rec-

plate into the bed die, and when the piston reascends, the lever *n* is released and swings outward, and the sliding plate, by means of a spring underneath it, returns to its place away from the die.

It is clear from the evidence that these plates were used at Medford upon the smaller machines more than three years before the application for the patent. They were afterwards applied to the larger machines, but no difference in form or construction is pointed out between these plates as applied to the larger and the smaller machines. The plaintiff's own testimony is clear that they were so used,

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This yielding block, frame, and spring is claimed by the plaintiff to have been the last invented of the improvements covered by the patent in suit, and that it was not made until December 3, 1877, and that he knows this because that is the date charged in the books of the firm that made them. Without this entry he has no means of fixing the date.

Cross-Int. 160. Have you any means of stating when those improvements were added to the two machines?

Ans. I should have to ask which two machines. [*Counsel states he refers to the two at Medford.*] Every machine that was built prior to leaving Medford was altered in some way after we went to Boston, so that not a machine remains to-day as when we left Medford. I can only say a large portion of the machines were built after going to Boston; the old machines which were built prior were altered over to correspond to the newer or later ones. [*Question repeated.*] I can say that certain improvements were added sometime during 1875, some during 1876, and some during 1877, and some during 1878. I have no means, except from rec-

ollection, as to the entire lot of those improvements, but have the means of knowing as to some of them, and can state about the time. The flexible lever, so designated there, the first perfected one that was put on, was put on after October 11, 1877, the yielding block, swinging lever, spring, and frame, was put on after December 3, 1877. I know this, because they were made outside the factory, and are charges on the books of the concern that built them; these charges were October 11 and December 3, and they were put on some time after that by us, can't tell whether two weeks or two months, but as soon as our mechanics could be spared from their regular work to put them on to the machines. The other improvements which I speak of I have no data other than from recollection.

Cross-Int. 161. No data other than recollection? Have you any recollection? If so, give it.

Ans. My recollection is, we moved into Boston, December, 1875, — that is, the fall and winter of 1875–6. The leases, &c., will show. It was after we went into Boston that I built the later machines, — I think thirty-four. These were not all built at once, but built in small lots. My recollection is that the first lot built was six; that these were built part by one firm, and part by another, brought to our factory and finished in our factory, and, as these machines were finished, changes and alterations were made. I cannot say when the first lot was delivered; that is a matter of record on our books and the books of the builder, the date of which I have not; it was some time in the summer of 1876; it might have been early, but cannot fix the date of their delivery, which was at different times; the machines were all finished in our shop, and none of them out of it.

Wade, p. 33, cross-int. 160–161.

The plaintiff's son, George A. Wade, who was employed under his father, is equally vague and uncertain as to dates:

Int. 14. When was what is called here a yielding block and frame and spring, which forms this combination, first attached to a machine or the machines, and where were the machines when this was applied in its perfect state?

Ans. I answered that once before, I believe. I think it

was in the latter part of 1877 or first of 1878. It was somewhere about that time. I can't state positive.

G. A. Wade, p. 58, int. 14.

In order to back up the plaintiff in his statement that these yielding blocks were first made December 3, 1877, there was called as a witness Rufus N. Gray, who testified that he cut the grooves in a yielding block frame on December 3, 1877, for Mr. Wade, who brought a frame into the shop of Hough & Runney on that day for that purpose. On cross-examination, he was asked, —

Cross-Int. 46. Will you please give the exact entry in your book relating to this hour's work, and all of it?

Ans. "The Boston Button Company, one hour's milling."

Cross-Int. 47. Now is there anything in that entry that enables you, or would enable anybody, to state that that work was bestowed on that yielding block frame?

Ans. There is no special mark here in the entry to show the kind of work done.

Gray, p. 106, ints. 46, 47.

So it appears that the plaintiff's case rests upon the date of a charge of "one hour's milling," in the books of a concern that was doing work for the machines of the Boston Button Company right along, as explained in discussing the evidence of this same witness, Gray, given five years later, by whose evidence it was also sought to fix the date of the flexible lever d^1 of claim 1. (See page of this brief.)

The evidence of the defendants as to the date when the yielding block and frame and spring were first used, is as follows: —

McCleery testifies as follows: —

Cross-Int. 116. Referring now to the model, will you look at what we call the frame that holds the yielding block, and state, if you can, who made it, and when?

Ans. I believe Mr. Leavitt made it, some time in the latter part of 1876.

Cross-Int. 117. What connection, if any, had the Leavitt referred to with the firm of Hough & Rumney?

Ans. He managed their machine shop, and, I believe, had an interest in their business; or, rather, he managed the machine shop of J. Leavitt & Co., and Hough & Rumney had an interest in it; afterwards, J. Leavitt went out and left them there.

McCleery, p. 73, cross-ints. 116, 117.

Leavitt, the machinist who was succeeded by Hough & Rumney in November, 1876, testifies as follows: —

Int. 2. Whether or not, at any time, you did any work for the Boston Button Company, making button-covering machines, or parts of machines, for them; and if so, when and where?

Ans. I made parts of button-covering machines for them at 138 Congress street, Boston, in 1875 and 1876.

Int. 3. Please state the name of your concern at that time.

Ans. A. Leavitt & Co.

Int. 4. Will you please to examine the model of the button-covering machine now shown you, and state what parts of the same you made?

Ans. I made the top circular plate, and the standards and shells and springs of the same, the automatic feeding plate, the yielding block frame. I think that was all I made; I may have made other parts, but I don't recollect.

Int. 5. Can you state when you made these parts?

Ans. They were made during those two years; most of it, I think, in 1876. I worked at different times, whenever Mr. Wade ordered the work.

Int. 6. Can you name a date before which all this work was done by you?

Ans. It was all done before November, 1876.

Int. 7. What enables you to fix that?

Ans. That's the time I left the business.

Cross Examination by BAXTER E. PERRY, Esq., *of Counsel for Complainant.*

Cross-Int. 8. You say that you left the business Novem-

ber, 1876: to whom did you leave it, or who succeeded you in the business of your firm?

Ans. I left it to the parties who were interested with me, Messrs. Hough and Rumney.

Leavitt, pp. 83, 84, ints. 2–8.

Cross-Int. 20. Have you any recollection as to the number of standards, shells, and springs you say you made?

Ans. I could not give you the number, but I know I made quite a large number of these shells and springs.

Leavitt, p. 85, ints. 20, 21.

Cross-Int. 26. Will you swear that the frame or frames you made were identical with the model frame shown you?

Ans. I do, in every particular.

Leavitt, p. 85, int. 26.

Lord, the machinist, employed at the factory of the Button Company, testifies as follows: —

Int. 2. When did you first go into the employment of the Boston Button Company?

Ans. In September, 1876.

Lord, p. 86, int. 2.

Int. 10. Whether you put on the device known as the yielding block frame and spring?

Ans. Yes, sir.

Int. 11. Do you know who made it?

Ans. I don't know, but I supposed Mr. Leavitt made it.

Int. 12. When did you do this?

Ans. Soon after I went there, within three or four months, I should say.

Lord, p. 87, ints. 10–12.

Cross-Int. 37. Will you state the exact time when you ever put on the frame, yielding block, and spring, on to one of those machines?

Ans. Within three or four months from the time I went there to work.

Cross-Int. 38. Could it have been earlier than May of 1877?

Ans. Yes, sir.

Cross-Int. 39. Do you know who made those parts?

Ans. No, sir.

Cross-Int. 40. They were not made in your shop?

Ans. No, sir.

Cross-Int. 41. Will you swear whether you put it on to one of the new machines or to one altered over first?

Ans. It was one of the old ones, I think; whether it had been altered then or not I could not tell.

Cross-Int. 42. Have you any recollection of any experiments or other form of yielding block and frame other than the ones as shown you in the model?

Ans. No, sir.

Lord, p. 89, ints. 37–42.

Leavitt's testimony can be relied on, for as to the date he cannot be mistaken, as he left the business in November, 1876; neither can he be mistaken as to whether he made a machine of this peculiar description. It may be true that one or more of these yielding blocks, frames, and springs were made later by Gray; and it is possible, though not probable, that the entry, "December 3, 1877, one hour's milling," may be for a yielding block and frame; but this does not show that it was the first of the kind made. Gray testifies that there is a charge for "three covering plates," that is, the automatic feeding plates, on January 4, 1878.

Gray, p. 104, int. 17.

The plaintiffs might as well claim that this was evidence showing that this was the first time covering plates were made. As we have already explained, the firm did not have a complete set of 48 of these sliding plates and swinging levers, with the yielding block and frame, as they were only used when cloth-backed buttons were made.

"The swinging lever, yielding block, and frame were only applied to work with these feeding plates; could be used with any machines with the same ease as the feeding plate."

Wade, p. 34, last part of answer to cross-int. 168.

It may have been, therefore, that Gray made yielding blocks and frames to go with feeding plates made at or about the same time; but this is not at all inconsistent with Leavitt's testimony that he had made the same article over a year before.

Gray, it is true, also testifies that none were made in the shop before December 3, 1877 (*Gray*, p. 103, int. 13); but when Leavitt, the master of the shop, who left the business in November, 1876, testifies that they were made by him, the testimony of Gray, one of his journeymen, that it was not made until after Leavitt left, cannot have very much weight. In fact, all Gray's evidence amounts to is, that this machinery was not made in the shop, so far as he knew, before Leavitt left, and does not really contradict Leavitt, since it is perfectly possible that they might have been made in the shop without Gray's knowledge, as seven or eight different men were employed there.

Gray, p. 103 int. 11.

Claim 6:

"The oscillating chock for alternately holding and releasing the spindle *g* of the piston E."

The spindle *g* is a rod surrounded by a spiral spring working inside of piston E. The die at the bottom of piston E is composed of several parts, one of which is attached to spindle *g*, and, in the progress of making the button, it is necessary that this part of the die attached to spindle *g* should at one time present an unyielding pressure upon the

bed dies in the revolving plate A^1, and at another time should yield to the pressure of the bed dies.

The spindle *g*, piston E, and the oscillating chock are shown in figs. 5, 7, 9, and the manner in which spindle *g* is enclosed in piston E, and the die attached at the lower end, is shown in figs. 14, 15, 16, and 17, and is described in the record.

Specification, p. 143.
Wade, p. 20, ints. 37–41.

Near the upper part of piston E is cut a mortise, and the spindle *g* extends through the piston up to this mortise. In this mortice is hung the oscillating chock, which by means of an arbor, *e*, and a ratchet wheel, e^1, is alternately swung over the end of the spindle *g*, preventing it from ascending into the mortise when the lower end comes in contact with one bed die and away from the spindle *g*, allowing it to rise into the mortise when the lower end comes in contact with another bed die.

Before the introduction of this oscillating chock, the same result was accomplished by a cylinder with notches into which the upper end of spindle *g* was received when it was necessary to be released. But, the cylinder not having the free play of the oscillating chock, if any dirt or obstruction prevented the spindle *g* from descending at the proper time, something would have to break. In the present device, if the spindle *g* does not descend, the only result is that the chock does not swing over it, and no breakage occurs.

Wade, pp. 20, 21, int. 41.

Wade admits that this oscillating chock was used by the firm at Medford, *i.e.*, before February, 1876.

Wade, p. 47, cross-int. 293.

And McCleery testifies that it was on the machine sent to J. S. Newell & Co. for a pattern for the thirty-four new machines built between September, 1876, and May, 1877.

McCleery, p. 71, ints. 92, 93.

We do not understand that it is contended by the plaintiff that this was not used by the firm more than two years before the application.

Claim 7:

Device for operating the centre piece h of the compound partible die.

The compound partible die affixed to the bottom of piston E is shown in figs. 14, 15, 16, and 17. When this die is used there are at the bottom of piston E three different parts moving independently, viz., the inner piece h surrounded by two concentric cylinders, F and J. To work the centre piece h, there is attached to an arm, h^1, running out through slots cut in F and J. To the end of this arm h^1 is attached a bar, h^2, shown in fig. 5, which runs up until it meets a cam, h^4 (shown in fig. 8), on the end of arbor e, the revolution of this cam playing upon the end of the bar h^2, which is affixed to the upright B by a spring, h^3, alternately causes this bar to raise and descend, and this motion is transmitted to the centre piece h by the arm h^1.

This device is used only to work the compound partible die, which is used only for making compound or fancy buttons.

Wade, p. 21, int. 42.

As to the time when this was first used, the plaintiff testifies as follows: —

Cross-Int. 295. Was the device for operating the centre piece of the compound die covered by your last patent used upon the machines at Medford, or any of them?

Ans. I could not say whether the present device was substituted for the old one just before or just after we left Medford.

Wade, p. 47, int. 295.

As the firm left Medford in February, 1876, it is clear that this device was used more than two years before the application for the patent, which was July 26, 1879.

We therefore submit that the patent in suit is void as to all its claims, because every one of the improvements covered by it was made, attached to some of the machines, and used by the firm more than two years before the application for the patent.

The plaintiff admits, we understand, that all of the improvements covered by the patent in suit were used by the firm more than two years before his application, with the exception of that portion of claim 1 called the flexible lever and marked d^1, and the yielding block, frame, and spring n and n^1 of claim 5. These two he claims were not invented until October and December of 1877, and without these improvements the machine was imperfect and its prior use experimental only. We think that we have shown that these two improvements as well as the others were applied and used more than two years before the application; but were the facts as the plaintiff claims them, *i.e.*, that the flexible lever and the yielding block, frame, and spring were not invented until less than two years before the application, the result would be that the patent would be valid as to those two devices, and void as to all the rest.

The use of the machine prior to the invention of the flexible lever and the yielding block, frame, and spring had been in no sense experimental.

Ever since 1868, and before that, the plaintiff and those from time to time associated with him had been engaged in the business of making and selling buttons on these machines. From time to time the plaintiff invented and applied the different improvements covered by his patent in suit to them. Without these improvements every kind of button could be made upon the machines that can be made with them.

Int. 24. Can the state or progress of your invention be determined by the kinds of buttons made, as testified to by McCleery? and if not, state why.

Ans. It cannot; they give no indication of the progress of this invention, other than between my old machine and my new; that is only in a single instance, or substantially so. Every style or shape of button that can be made now I have made upon the old foot machine before this invention was made. This invention relates entirely to the saving of stock and labor and the facilitating production. If there had been a new button I should have patented the product.

Wade, p. 112, int. 24.

The yielding block, frame, and spring, as we have already explained, was only to prevent breakage in case of obstruction to the free play of the sliding feeding plates. Without the yielding block, frame, and spring, the machine would work successfully, and, further, the whole combination of the sliding feeding plates *m*, swinging lever *n*, and yielding block, frame, and spring, were only adjusted when certain kinds of buttons were being made (page of this brief), and superseded a former way of making these same buttons by the use of rings put upon the dies by hand.

Wade, p. 17, int. 25.

The flexible lever d^1 was an improvement to prevent breakage in case of obstruction to the free working of the

detent d; without it, the machine had been worked successfully for some years.

Brief, p. 10.

So of the other improvements. The partible die of claim 2, and the arrangement for working its centre piece of claim 7, was a contrivance for the more efficient making of compound buttons; but without this die the machine had been in successful operation.

The sleeve-stripping device of claim 3 was an improvement for the more effectual working of the machines when thick-edged buttons were being made, and the oscillating chock of claim 6 succeeded a prior method of alternately holding and releasing the spindle g^1, which had been in successful operation.

Pages 20 and 30 of this brief.

There is nothing to show that this machine, with all these inventions, is now perfect, — incapable of further improvement, — but every year that it is in use it is likely that some new device will be added to it by one inventor or another, all tending to its increased effectiveness.

The plaintiff cannot, therefore, claim that, by showing one of his improvements to have been made within two years before the application, his patent is valid for all the others made before that time.

On this point, the case is exactly covered by the decision of this Court in —

Smith & Griggs Mfg. Co. v. *Sprague*, 123 U.S. 249.

That was a suit for an infringement of a patent for improvements in a machine for making buckle levers containing several claims. "Each of the claims," say the Court, "is

for a specific combination in a practically successful machine for making buckle levers, and each is a separate and distinct invention, and claimed as such. If, without the use of the combinations contained in the excluded claims, the complainant had a machine practically useful for the purpose for which it was designed, which could be used with commercial success as superior to modes of manufacture previously in use, and which in fact he did so use for profit in the ordinary course and conduct of his business, and for the purpose of a successful prosecution of that business, it can hardly be said with propriety that such use was merely experimental, although during the period of its operation he was also engaged in the invention of improvements by which he hoped and expected to make it more valuable and useful. Where the use is mainly for the purposes of trade and profit, and the experiment is merely incidental to that, the principal, and not the incident, must give character to the use."

The evidence shows an exactly similar use in the case at bar.

In the case at bar the evidence shows that the use of the machines and improvements was for the purpose of trade and profit, and that the experiments were merely incidental to that.

After an examination of the brief for the complainant, we submit the following additional considerations in reference to the discussion of the evidence as to the time of the first use of the flexible lever and the yielding block, frame, and spring.

Charles H. Haven, at the time these inventions were made, was in charge of the machines for supplying the metal parts

of the button. The covering machines were at that time under the charge of George A. Wade.

Haven, p. 127, int. 16.
Haven, p. 128, int. 32.

Therefore he did not know, and was not asked, the dates when these particular improvements were put on the covering machines.

Henry B. Metcalf's testimony, so much relied on by the plaintiff, is as follows: —

Int. 37. Can you state a date by which these thirty-four new machines were completed and the twelve old machines altered and ready for use in your factory in Boston? *Ans.* I can fix a time, but cannot be very accurate, as I have not charged my mind with that matter. I should say it was by or before the close of 1878, it would seem to me.

Metcalf, p. 93, int. 37.

This answer of Metcalf, on which so much reliance is placed by the plaintiff, is not to a question as to when the last improved appliances were put on any of the machines, but when the whole forty-eight were ready for use after the alterations in the old ones. There is no dispute that this was in or about August, 1877.

Stone, p. 78, ints. 5–8.
Newell, p. 107, ints. 4, 5.

This date is, however, immaterial, as the question is not when these machines were ready for use, but when these appliances were put upon any of them, as they could be used without, and were so used.

The defendant, Metcalf, had nothing to do with the mechanical part of the business. He lived in Rhode Island,

and had to do with the financial part of the Button Company's business, visiting the factory once a week or so, but not knowing, or professing to know, about the progress in the appliances invented by Mr. Wade.

Metcalf, p. 90, int. 1; p. 96, int. 71; p. 97, int. 77; p. 97, int. 84.

Wade's testimony that all the improvements were first put upon one of the altered old machines, is without any confirmation; and, were it so, would prove nothing, as at least five of the old machines had been altered over more than two years before the application.

Newell, p. 107, int. 4.

Stone's testimony that he made the flexible lever called by him spring holder, is supported by the charge proved in Newell's books.

Newell, p. 107, int. 8.

The statement on page 15 of the brief, that the feeding-plates were not delivered until January 3, 1878, therefore that the yielding block could not have been made before that time, is erroneous, as the feeding-plates were used at Medford before February, 1876.

Wade, p. 47, int. 291.

II.

The defendants have the right, under section 4899 of the Revised Statutes, to use the forty-eight machines with the improvements thereon.

Whether the patent be valid or invalid, the defendants have the right to use the specific machines which, with the

improvements that were on them, were built by the firm, and owned and used by it, and released by Wade to the defendants at the dissolution of the firm, and which since the dissolution have been used by the defendants. It is not contended by the plaintiff that they are using any others; and therefore, if they have a right to use these forty-eight machines, the bill must be dismissed.

Section 4899 of the Revised Statutes of the United States is as follows: —

"Every person who purchases of the inventor or discoverer, or with his knowledge and consent constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor."

The defendants claim to be within the exact terms of the statute, because —

First. They have, with the knowledge and consent of the inventor, prior to his application for a patent, constructed these machines with the improvements thereon.

Second. They are using machines which were constructed with the knowledge and consent of the inventor prior to his application for a patent.

In either case the statute gives them the right to use the specific machines so made without liability therefor to the patentee.

FIRST.

The statute provides that every person who, with the knowledge and consent of the inventor, constructs any

newly invented machine prior to the application by the inventor for a patent, shall have the right to use, and vend to others to be used, the specific machine so made without liability therefor.

The machines in question in this suit, and all the improvements upon them, were built by the firm and at the firm's expense, and were used by them even on the plaintiff's theory more than a year and a half previous to the application for a patent, and on the dissolution of the partnership the plaintiff released all his interest in these machines to the defendants, stipulating that the release should not operate to enlarge, diminish, or otherwise affect the defendants' right to their use.

The construction and use of the machines by the firm was a construction and use by all the members of the firm; that is to say, they were constructed by the defendants.

Every member of a firm which constructs a machine is a constructor thereof just as much as if he did it alone or with the assistance of another person not his partner.

If three persons not partners should together build a machine with the knowledge and consent of the inventor before his application for a patent, it would hardly be contended that the protection of the statute did not extend to each of the three, and that any one of them could not use the machine so constructed.

How could it affect the rights of the parties under this statute, in the case supposed, that they were partners instead of tenants in common? They are not for that reason any the less persons who have constructed the machine within the meaning of the act.

The defendants, therefore, by virtue of the construction of the machines by them, are within the exact terms of the

statute, and have the right to use these specific machines, and to vend them to others to be used.

Not only are the defendants within the exact terms of the statute, but they are within its intent. Before the act of March 3, 1839, a patent was void if the invention had been known and used prior to the application.

Pennock v. *Dialogue*, 2 Pet. 1.

By the act of 1839 it was provided that, in order to avoid the patent, the invention must have been in public use more than two years before the application; and it was also provided that any one who purchased or constructed any newly invented machine, manufacture, or composition of matter prior to the application, should have the right to use, and to vend to others to use, the specific thing so made or purchased.

Act of March 3, 1839, § 7, 5 Stat. at Large, 354.

This is the provision which now appears in Revised Statutes, section 4899, above quoted.

One of the objects of this act was to secure to the inventor the right to sell as many of his machines as he chose within the two years prior to his application for a patent, and to permit him to allow other persons to make and use them during that period without losing his right to a patent, provided that his acts did not amount to an abandonment to the public.

"This relieved him from the effects of former laws and their constructions by this Court, unless in case of an abandonment of the invention or a continued prior use for more than two years before the application for a patent."

McClurg v. *Kingsland*, 1 How. 202, at page 209.

But at the same time some provision should be made to protect such persons as had purchased or constructed newly discovered inventions with the authority of the inventor, and therefore the right was given to them to use articles so constructed, and to sell them to others, thus taking out such articles from the operation of the patent right conferred upon the inventor, and according to such person the same privileges as are accorded to the purchasers of patented articles sold by the inventor after he has obtained the patent.

Had the act stopped with extending the rights of the inventor, it would have led to this mischief, that an inventor might induce people to construct or purchase his invention, and then, after obtaining a patent, he might sue them for an infringement. To prevent any such action by inventors, the provision above quoted was inserted, giving full rights to such persons to use their machines, and to vend them to others to use.

This act was passed for the express purpose of preventing an inventor from doing exactly what the plaintiff is attempting to do in the case at bar. The defendants laid out money on their machines, and put capital into the business, under the belief that they were entitled to the machines built by them and at their expense, and now the plaintiff is attempting to prevent them from using their machines. To allow him to succeed in this attempt would be most unjust, and to prevent this wrong the statute was passed.

Under these acts it has been held that, where "a workman by using the tools and time and money of his employer, with his consent, makes an invention and applies it in his employer's business, the employer may continue to use it." (LOWELL, J., Record, p. 135.)

McClurg v. *Kingsland*, 1 How. 202.
Chabot v. *Am. Button Hole Co.*, 6 Fisher, 71.

It makes no difference that, instead of being an employee of the defendant, the plaintiff was their partner. When he consented to the construction of these machines by the firm, the specific machines so constructed were taken out of the operation of any patent the plaintiff might subsequently acquire.

The purpose of the statute is to give to articles purchased of the inventor, or constructed with his knowledge and consent before his application, the same privileges that are accorded to articles sold by the inventor after he has obtained his patent.

An article sold by the inventor after he has obtained his patent "is no longer within the limits of the monopoly. It passes outside of it, and is no longer under the protection of the act of Congress."

Bloomer v. *McQuewan*, 14 How. 539, at p. 549.

"Complete title to the implement or machine purchased becomes vested in the vendor by the sale and purchase, but he acquires no portion of the franchise, as the machine, when it rightfully passes from the patentee to the purchaser, ceases to be within the limits of the monopoly.

"Patented implements or machines, sold to be used in the ordinary pursuits of life, become the private individual property of the purchasers, and are no longer specially protected by the patent laws of the state where the implements or machines are owned and used."

Mitchell v. *Hawley*, 16 Wall. 544.

The statute provides not only that the purchaser and constructor of such machines may use them and sell them to others to be used, but it also provides that every person

using or selling such a machine shall have the right to use and sell it without liability to the patentee.

As stated in the opinion of the Court below, "the section in question describes in unmistakable language a complete and perpetual release of the specific articles from the monopoly."

Opinion of the Court, Record, p. 135.

The firm's right to their use was no personal license during the existence of the firm.

In *McClurg* v. *Kingsland*, 1 How. 202, where the Court held that an employer had the right to continue the use of a process invented by a workman after the workman had obtained a patent, because the employer had used it with the workman's consent before his application, they use this language with reference to the statute: "It puts the person who has had such prior use on the same footing as if he had a special license to use his invention, which, if given before the application for a patent, would justify the continued use, after it issued, without liability." The Court were not speaking of a specific machine and the right to use and sell it, but were speaking of the right to use an invented process. Such a right is best described by saying it puts the party on the same footing as if he had a special license, and the word personal might even be added to the description, for the employer would clearly have no right to assign this right to another. But such a description is inapplicable to the rights of the builder or purchaser of a patented machine who has by the statute the right to use, and the right to sell to others to be used, the specific machine.

That the right of the firm was no mere personal license is shown by the fact that the machines might have been sold by the firm to an outside party, who would have the right to use them as a right appurtenant to his purchase, without

reference to the length of time the Boston Button Company might continue in existence.

They could be seized and sold by the creditors of the firm to satisfy their claims, and the purchasers would have the right to use them as long as the machines lasted.

This section has been held to give the right to the members of a firm to use the inventions of one partner in the following cases: —

NIXON, J., in *Duffy* v. *Reynolds*, 24 Fed. Rep. 855.
ACHESON, J., in *Keller* v. *Stolzenbach*, 20 Fed. Rep. 47.
LOWELL, J., in *Wade* v. *Metcalf*, 16 Fed. Rep. 130.

These machines, therefore, freed of any claim by the holder of the patent, were a part of the assets of the partnership.

A receiver could have sold them to a third party.

Montross v. *Mabie*, 30 Fed. Rep. 237.

Instead of being sold to a third party, the plaintiff sold out his interest in them to the defendants (Record, p. 55), and thereby the defendants have acquired as complete a title as though they had bought them at a receiver's sale.

The plaintiff claims that he did not make an absolute sale to his copartners, and that the stipulation in the agreement of dissolution that nothing therein should "operate as an assent on the part of Wade to the right to use said improvements upon said machines," prevented the right to use them from passing to the defendants. The answer to this claim is that the power to say who should or should not use these machines had passed beyond the patentee. That right was in the partnership and had been given to the members of it by the statute.

As patentee, the character in which the plaintiff files this

bill and stands before the Court, he has no rights. If it should be held that by the reservation the plaintiff did really reverse something, *i.e.*, his share in the profits by the use of the machines, then his remedy is by a bill alleging the partnership, and that the machines were the property of the partnership, and that he is entitled as a partner to an account of the profits made by the defendants by their use. Under this bill for an infringement of the patent he has no standing whatever.

SECOND.

The plaintiff must concede that the machines in question with the improvements were constructed with his knowledge and consent prior to his application for a patent.

The statute confers the right to use such a machine not only upon the person who constructs it prior to the inventor's application for a patent with his knowledge and consent, but it also confers upon every person who uses a machine so constructed the right to use it without liability to the patentee. The position of the plaintiff that "this section only gives protection to the person who purchases the machine from the inventor, or who constructs it with his knowledge and consent prior to his application for a patent, and to his vendee of such machine," is therefore unsound. As the facts are conceded upon which the defendants rest this claim it can only be avoided by the plaintiff by convincing the Court that some construction of the statute should be adopted other than that claimed by the defendants.

We submit that no other construction is possible. The language of the statute is clear and explicit, and it says that every one using a machine, constructed with the knowledge and consent of the inventor prior to his application for a patent, shall have the right to use it without liability.

It is plain that the right given is not limited to such per-

sons as have used such machines with the consent of the inventor, or prior to his application for a patent.

Had any such limitation been intended, it would have been so expressed.

This clause of the statute shows conclusively that the right given by the statute is no mere personal license, and that it is a complete and perpetual release of machines so constructed from the monopoly conferred by the patent.

But even if the right conferred by the statute is a mere personal license, it is a license to every one who uses such a machine to use it without liability to the patentee, and the license is therefore a license to these defendants.

The plaintiff's answer to this position is, we understand, this: that the right given by the statute is a personal license and given not to every one who uses the machine, but only to those who "rightfully" use it. No such limitation is found in the language of the statute. The plaintiff must therefore claim that some such limitation is implied.

No authority can be found for implying any such limitation.

The cases of

Kendall v. *Winsor*, 21 How. 322,
Pearson v. *Eagle Screw Co.*, 3 Story, 402,

are no authority for any such position.

Those cases arose under the act of 1839, in which the clause in question is found, but without any express requirement that the specific machines shall be built with the "knowledge and consent of the inventor." It was held in those cases that a fraudulent, surreptitious, piratical construction of a machine was not such a construction as was covered by the first clause of the act of 1839. That question cannot arise since the act of 1870, for by the terms of that act

the original construction of the specific machines is expressly required to be with the knowledge and consent of the inventor, and by the same act which added that requirement, the privileges of the act were extended to all who should use a machine so constructed, not limiting the latter class to such persons as should use such machines with the knowledge and consent of the inventor, but purposely avoiding any such limitation. There is no reason for implying any such limitation to the use of the machine, for the original construction of the machine must be with his knowledge and consent, which is a sufficient protection of his rights as a patentee. If the use of the machine is wrongful and in violation of any other right of property, then the person whose rights are violated has his remedy under the laws of property in the state where he lives.

The reason given by the Court, *Pearson* v. *Eagle Screw Company*, for the decision, was that it could not have been the intention of this clause of the statute to confer on a fraudulent purchaser a right to use an invention pirated from the original inventor by wrong.

Under section 4899 no person who pirates the invention from the inventor acquires any rights.

III.

Apart from the provisions of section 4899, *the defendants have the right to use these machines with their improvements.*

Apart from the provisions of section 4899, the defendants have the right to use these forty-eight machines with their improvements by virtue of their contractual relations with the plaintiff. So that even if these improvements had been added to these machines by the plaintiff after his application for a

patent, or if for any other reason section 4899 had no application to these improvements, the defendants would still have the right to use them.

The plaintiff, at the time he made these inventions, was in partnership with both defendants. His interest in the profits of the firm was one third, and in addition thereto he was paid a salary by the firm of fifteen hundred dollars a year.

This salary was paid to him as an inventor for the improvement and development of the machinery of the firm.

On this point there are three witnesses, the complainant and the two defendants, and there is no substantial difference between their statements.

The defendant McCleery testifies as follows: —

Int. 33. You have said that Mr. Wade was paid a salary, in addition to his profits as a member of the firm, of fifteen hundred dollars per year. For what was that salary paid?

Ans. For the improvement and development of the machinery of the firm.

McCleery, p. 66, int. 33.

Cross-Int. 155. Why then did you say that Wade's salary was paid to him for the improvement and development of the machinery?

Ans. That was a verbal agreement.

Cross-Int. 156. When and where was it made?

Ans. It was made when I went into the firm. I speak now of my part of agreement, — I believe in the office on Cornhill.

Cross-Int. 157. Will you state who was present and precisely what was said?

Ans. There were only the three partners present at that time, that I am aware of, that could hear the conversation. Mr. Metcalf was urging for the further improvement of machinery and I was urging that Mr. Wade should invent some devices for feeding the different parts automatically; then when we moved to Boston we were still urging Mr. Wade on these new devices and had quite a conversation in our

office on Purchase street, and at Mr. Wade's request took all other duties off his shoulders.

Cross-Int. 158. Is that all the verbal agreement that you refer to?

Ans. I believe his salary was raised from twelve to fifteen hundred dollars per annum at the time of that first agreement.

Cross-Int. 159. What were the duties in their largest extent which were left to Mr. Wade?

Ans. The improvement and development of the machinery.

Cross-Int. 160. Had he any superintendency or supervision of any portion of the work?

Ans. Yes, the construction of the machinery.

Cross-Int. 161. Any other duties?

Ans. That's what he was to give his whole time to.

Cross-Int. 162. Had he control of the machinists?

Ans. As regards their working on this machinery, he had.

McCleery, pp. 76, 77, ints. 155–162.

Int. 11. Please state the arrangement after you came to Boston, or the plan or scheme for the management of the business of the Boston Button Company?

Ans. I was to have general charge of the factory and business. The work was divided into departments as follows: Mr. Haven had charge of the machines, machinery, and help required for making the metal parts for the buttons; Mr. George Wade had charge of the covering machines; Mr. Taylor had charge of the order department, scrap cutting, and shipping; these departments covered the manufacture. Mr. William W. Wade was to devote his time to the perfection of the machinery in all the departments.

McCleery, p. 130, int. 11.

The defendant Metcalf testifies to the same effect:

Int. 26. What were the duties of Mr. Wade while a copartner with you and Mr. McCleery?

Ans. Mr. Wade was at all times recognized as a constructor, inventor, and improver of machinery, and that duty was assigned to him.

Metcalf, p. 92, int. 26.

The complainant himself makes the same statement:

Cross-Int. 272. You have stated his duties and what he did. Will you now state what you did yourself?

Ans. I had no defined duties. I had the entire charge of the manufacturing department, constructing of the dies, constructing of the buttons, and adapting one piece to another. Buttons were composed of many parts. I might add that I was there a great part of the time, not only directing others, but with my coat off. If there was anybody there that could not do the work in the department referred to, or any department of the establishment, I took hold of that and did it with my own hands to show them how, *as I was a practical machinist and builder, and adjuster and inventor of machinery, particularly in the line of the manufacture of buttons. I directed the building of new machinery. I made inventions.* I applied, or caused to be applied, to the machinery the various improvements that were made, not only upon the machinery in this suit, but I built, or caused to be built, various other machinery, which I termed supply machines. These machines were of my own invention, made by me or at my direction, improved from time to time as new styles and kinds of buttons were required by the market. For instance, what we termed the old machines would make a very limited number of styles of buttons what we called plain, and as a new style complex in its character was required by the market, I made and applied to these machines various improvements to meet this demand of the market.

Wade, p. 44, cross-int. 272.

The original machines, apart from the improvements, were the property of the firm. Twelve of them had been purchased by it, and the rest manufactured and paid for by it. The patent covering the original machines was owned jointly by the plaintiff and the defendant Metcalf, and an interest in this patent had been given to the defendant McCleery. The improvements were put on the machines at the expense of the firm.

These machines, with their improvements, were therefore

the product of the plaintiff's ingenuity and the defendants' capital and business enterprise, and they, with the right to use them, became assets of the partnership.

Suppose two men, A and B, go into partnership for the purpose of making buttons. A is a practical button-maker, and B is a capitalist. B contributes to the common stock one thousand dollars, A contributes his mechanical ability. After the partnership has been in existence a short time, B's contribution has been converted by A's genius into a machine of A's invention for manufacturing buttons. Can A then patent his invention and dissolve the partnership, and thereby obtain for himself alone the right to say whether or not the machine which is the property of both shall be used?

If he could, the result would be monstrous.

The case of *Hapgood* v. *Hewitt*, 119 U.S. 227, is no authority for such a position, for the patent in that case was a patent for a manufactured article, and the question there was whether an employer could assign to others the right to go on and manufacture other articles of the same kind. The question did not arise in that case whether the employer could sell, with the right to use them, specific articles which had been manufactured by it at its own expense, with the consent of the employee.

Had the Boston Button Company been manufacturing and selling a patented article with the consent of the owner of the patent, who was a member of the firm, they would have been exercising, by virtue of an implied license, the privileges conferred by the patent. This was the case in *Hapgood* v. *Hewitt*, 119 U.S. 227. The distinction between the two cases is very important in determining the privileges and rights possessed by the firm.

In the first case, which is the case at bar, there is no limit to the right of use of the specific machine except the life of

the machine itself. The firm may use it and sell it to others to be used free of any claim by the patentee.

In *Hapgood* v. *Hewitt*, 119 U.S. 227, the corporation claimed a right under the patent to make and sell the patented ploughs; *i.e.*, that the inventor, by permitting the corporation which employed him to manufacture and sell his patented articles, had conferred upon that corporation a license to use the patent, which they could confer upon others. This it could not do; but there could have been no question that if, at the time of the dissolution of the corporation which employed the inventor, there had been any patented ploughs on hand, these, with the right to use them, could have been sold for the firm's benefit. The case would then have been analogous to that at bar.

The case at bar is similar to *Montross* v. *Mabie*, 30 Fed. Rep. 234. There a firm had manufactured for sale a lot of stoves, which were covered by a patent granted to one of the partners. The stoves were manufactured after the application for the patent, so that section 4899 did not apply to the case. The firm was dissolved and a receiver was appointed, and it was decided that the receiver could sell the stoves on hand and give a good title to the purchasers to use them.

Montross v. *Mabie*, 30 Fed. Rep. 234.

So here, at the dissolution of the firm, the specific machines on hand, with the right to use them, could be sold by a receiver, as has already been stated. Instead of this, the plaintiff sold out his interest in them to the defendants, and the defendants thereby acquired the entire right in them, which included the right to use them just as much as if they purchased them of a receiver of the partnership effects.

It was held by the Supreme Court of Pennsylvania, in a

case where a process was invented by one copartner while a member of the copartnership, for which he obtained a patent, that the firm were entitled in equity to have a license executed to them by the patentee to use the process during the existence of the patent.

Slemmer's Appeal, 58 Pa. St. 155.

On an analogous principle it has been decided that where an employee applies his own inventions, made in the course of his employment and at his employer's expense, to machines belonging to the employer, that the employer acquires the right to use the specific machines so constructed as long as they last, although the employer may have no right to the patent itself.

Barry v. *Crane Brothers Mfg. Co.*, 22 Fed. Rep. 396.
Wilkens v. *Spafford*, 3 Ban. & Ard. 274.
Am. Tube Works v. *Bridgewater Iron Co.*, 26 Fed. Rep. 334.

By virtue of the agreement of partnership between the plaintiff and his partners, and the application by him of his improvements to the firm's machines, the copartnership acquired as complete a right to these specific machines and to the use of them as if they had bought them of an outside party.

Inasmuch as the firm acquired the right to use these machines, all the partners have their proportionate share in such right to use them; and the plaintiff, after dissolution, cannot maintain a bill to enjoin their use by the defendants, the other members of the firm, as an infringement of his patent, for that would be to give him sole control over these machines, and he would thereby acquire a disproportionate share in the joint property.

Kenny's Pat. Button-Hole Co. v. Somerville
38 Le. J. Rep. 878.

IV.

The bill should be dismissed with costs, on the ground that the patent in suit is wholly void; or if it is not, that the defendants have a right to use these specific machines. If the Court should be of opinion, however, that the patent is valid as to the lever d' and yielding block, frame, and spring, and also that the defendants have no right to use these appliances which they acquired from the firm, then they should only be enjoined from using flexible lever d' of claim 1 and the yielding block, frame, and spring of claim 5. As to the rest of the locking arrangement covered by claim 1, the patent is void.

EDWARD W. HUTCHINS,
HENRY WHEELER,
for Defendants.

IV.

The bill should be dismissed with costs, on the ground that the patent in suit is wholly void; or if it is not, that the defendants have a right to use these specific machines. If the Court should be of opinion, however, that the patent is valid as to the lever d' and yielding block, frame, and spring, and also that the defendants have no right to use these appliances which they acquired from the firm, then they should only be enjoined from using flexible lever d' of claim 1 and the yielding block, frame, and spring of claim 5. As to the rest of the locking arrangement covered by claim 1, the patent is void.

EDWARD W. HUTCHINS,
HENRY WHEELER,
for Defendants.

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No 14
OCT 23 1888
JAMES H. McKENNEY, CLERK.

Supreme Court of the United States,

OCTOBER TERM, 1888.

Ex parte The Farmers' Loan and Trust Co., Petitioner.

IN THE MATTER OF THE FARMERS' LOAN AND TRUST COMPANY

vs.

THE TEXAS CENTRAL RAILWAY COMPANY ET AL.

MOTION FOR LEAVE TO FILE PETITION, AND FOR RULE TO SHOW CAUSE WHY MANDAMUS SHOULD NOT ISSUE; PETITION; AFFIDAVIT; EXHIBITS; AND BRIEF.

TURNER, McCLURE & ROLSTON,
Solicitors for The Farmers' Loan and Trust Co., Petitioner,
20 Nassau Street, New York.

Copies
No 3

Grace

Supreme Court of the United States.

OCTOBER TERM, 1888.

Ex-parte THE FARMERS' LOAN AND TRUST COMPANY,
Petitioner.

IN THE MATTER
of
THE FARMERS' LOAN AND TRUST COMPANY,
vs.
THE TEXAS CENTRAL RAILWAY COMPANY *et al.*

Motion for leave to file Petition; and for rule to show cause why mandamus should not issue.

And now comes The Farmers' Loan and Trust Company, petitioner, and moves this Honorable Court for leave to file its petition, presented herewith, and for a rule to show cause why a mandamus should not be issued in due form of law out of this Honorable Court and under the seal thereof, addressed to the Circuit Court of the United States for the Northern District of Texas, commanding the said Circuit Court to allow the appeal of your petitioner, and to fix the amount of the bond to be furnished by your petitioner on such appeal, if the same is to operate as a *supersedeas*, and also the

amount of such bond to be furnished in case the same should not operate as a *supersedeas* (all such action to be as of June 12, 1888), as prayed for in said petition, and makes such motion on the grounds that the decree from which said appeal is desired to be taken is a final decree within sections 692 and 699 of the Revised Statutes of the United States, allowing appeals to the Supreme Court of the United States, in certain cases therein provided; and on the further ground that said Court refuses to allow such appeal, and to fix the amounts of such bonds; and for further grounds refers to its petition herewith filed.

SUPREME COURT OF THE UNITED STATES,

OCTOBER TERM, 1888.

Ex parte THE FARMERS' LOAN AND TRUST COMPANY,
Petitioner.

IN THE MATTER
of
THE FARMERS' LOAN AND TRUST COMPANY
vs.
THE TEXAS CENTRAL RAILWAY COMPANY *et al.*

The Petition of the Farmers' Loan and Trust Company respectfully shows to this Honorable Court as follows:

I.—The litigation involving the Texas Central Railway Company, was commenced in the month of April, 1885, in the Circuit Court of the United States for the Northern District of Texas, at Waco, by the filing of a

bill by Morgan's Louisiana and Texas Railroad and Steamship Company against the Texas Central Railway Company, for the appointment of a Receiver of said railway company and for the sale of its property, to enforce an alleged lien. 8

II.—Your petitioner, the Trustee under the trust deeds or mortgages made by the Texas Central Railway Company, intervened in the cause and subsequently filed a cross-bill of foreclosure. The final decree, which was one of foreclosure and sale, made at the April term of said Circuit Court in 1887, sustains the priority of the lien of the mortgages to the extent of over $4,000,000, and adjudges that the claim of the original complainant is junior in lien. 9

III.—Appeals were taken from the decree of foreclosure, both by the original complainant and by the Texas Central, and said appeals are now pending in this Court, being Nos. 631 and 635 on the Docket. A motion, filed in this Court in February last, to advance the cause, was denied. 10

IV.—On February 15, 1888, and after said decree of foreclosure and sale was made, the Receivers of the Texas Central Railway presented their petition to the said Circuit Court, for an order authorizing them to borrow the sum of $120,000, on certificates, the same to be a first lien on the property. Your petitioner, in accordance with the wishes of the bondholders, opposed such application. 11

V.—On March 21, 1888, the Special Master in the cause, to whom said petition had been referred, filed his report, recommending that the prayer of said petition should be granted, and the Receivers authorized to borrow so much of $120,000 as might be necessary, to procure cross-ties, replace and repair bridges and piers and widen embankments, where necessary, to provide ties, etc., and to issue certificates therefor as a lien upon the said railway, second only to the $25,000

12 of certificates then outstanding. On April 11, 1888, your petitioner duly filed exceptions to this report, which were heard by the consent of the parties on the 26th day of May, 1888, before the Honorable Don A. Pardee, Circuit Judge, sitting at chambers at the City of New Orleans. The exceptions were argued by counsel, but were overruled, and a decree was made and entered on May 26, 1888, in the premises, a true copy of which is hereto annexed, marked Petitioner's Exhibit "B."

13 VI.—After the making of such decree your petitioner filed its petition of appeal, wherein it asked said Court to grant your petitioner an order of appeal from the whole of said decree, the said appeal to operate as a *supersedeas* on the petitioner giving a bond to be approved by the Court and in such sum as the Court might fix. A copy of said petition is hereto annexed and marked Petitioner's Exhibit "A." The Circuit Judge, the Honorable Don A. Pardee, refused the appeal, and handed down an opinion, a copy whereof
14 is hereto annexed and marked Petitioner's Exhibit "C." Thereafter your petitioner made its application to the Honorable L. Q. C. Lamar, Circuit Justice of said Circuit, for an allowance of the appeal from said decree. The Honorable Circuit Justice concurred in the order of the Circuit Judge.

VII.—Your petitioner further shows that in said decree it is provided that such certificates and obligations, when issued, shall become and are therein
15 declared to be a lien upon the roadbed, rolling-stock, depots and all other property of said Texas Central Railway Company, including the net earnings thereof, after deducting the expenses of the receivership and the operation of the road, said lien to be prior to all other liens, except the lien for $25,000 of Receiver's certificates theretofore allowed to be issued under the order of said Court.

VIII.—Before the making of said decree, petitioner consulted with the holders of the bonds secured

by said mortgages respecting their views of the situation, and as to whether they were willing to have such a debt created as was proposed by the Receivers, and so ascertained the wishes of parties representing an overwhelming majority in interest (probably four-fifths) of the said bonds, being all the bondholders whom your petitioner could reach. Said bondholders were unwilling to consent that any such preferred debt should in any way be created, and they instructed your petitioner to oppose the creation of any such indebtedness. These bondholders are ready to buy the property and put it in order at their own expense, but they are not willing to advance the money which seems to be necessary to put the road in a condition to fulfill its obligations to the public so long as the foreclosure decree remains unexecuted. Their reasons for taking this position, so far as they have expressed them to your petitioner, are to the effect that, while they are willing, if the trustee were put in possession of the railroad, or if they became themselves the owners of the railroad property through a reorganized company, to provide a sufficient sum of money to put the road in good order and repair, nevertheless they consider the course which has been pursued by the parties controlling, through their holdings of stock, the organization of the Texas Central Railway Company and of the Morgan Company, to be dictated simply by a desire to ruin the interests of the bondholders in the property, and, if possible, to encumber the property with first liens to such an extent that the bondholders would have to abandon their interest in the same.

IX.—When your petitioner presented its petition of appeal as aforesaid, it stood ready and offered to give a bond to be approved by the Court, in such sum as the Court might fix, and it is now ready and willing to give a good and sufficient bond on such appeal.

Wherefore your petitioner prays for a rule to show cause why a mandamus should not be issued in due

form of law out of this Court and under the seal thereof, addressed to the Circuit Court of the United States for the Northern District of Texas, commanding the said Circuit Court to allow the appeal of your petitioner, and to fix the amount of the bond to be furnished by your petitioner on such appeal, if the same is to operate as a *supersedeas*, and also the amount of such bond to be so furnished in case the same shall not operate as a *supersedeas*. All such action, to be as of June 12, 1888.

And your petitioner will ever pray, etc.

THE FARMERS' LOAN AND TRUST COMPANY, [L. S.]
By R. G. ROLSTON,
President.

TURNER, MCCLURE & ROLSTON,
Solicitors for Petitioner,

HERBERT B. TURNER,
Of Counsel.

SOUTHERN DISTRICT OF NEW YORK, }
City and County of New York, } *ss.:*

I, Rosewell G. Rolston, being duly sworn, depose and say that I am the President of The Farmers' Loan and Trust Company, the petitioner above named, and have been such President for a number of years past; that I have read the foregoing petition and know the contents thereof, and that the same is true, to my own knowledge, except as to the matters therein stated to be alleged on information and belief, and as to those matters I believe it to be true.

I further say that the reason why this verification is not made by the said petitioner is that it is a corporation; that I am an officer of the same, to wit, the President, and that my knowledge is derived from having taken my part in the transactions spoken of, and my grounds of belief are information communicated to me by the agents of said corporation and others. I further say that the seal affixed to said

petition is the corporate seal of said petitioner, and was by me affixed to said petition by authority of said corporation. 24

R. G. ROLSTON.

Sworn to before me, October 10-1888.

(L. S.) JOHN MCCLURE,
Notary Public,
N. Y. County.

25

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1888.

Ex parte:

THE FARMERS' LOAN AND TRUST COMPANY,
Petitioner. 26

IN THE MATTER
of
THE FARMERS' LOAN AND TRUST COMPANY
vs.
THE TEXAS CENTRAL RAILWAY COMPANY *et al.* 27

SOUTHERN DISTRICT OF NEW YORK, City and County of New York, } *ss.*:

Herbert B. Turner, being duly sworn says: I am a member of the firm of Turner, McClure & Rolston, the solicitors for the Farmers' Loan and Trust Com-

28 pany, petitioner herein. At the April Term, 1887, of the Circuit Court of the United States for the Northern District of Texas, a decree of foreclosure and sale was rendered, after argument, in the above-entitled causes. In the decree, after finding the facts, including the default, the Court finds that the Trustee is entitled to a decree for the sale of the property to satisfy the principal and interest of the bonds, and that the claim of the Morgan's Louisiana and Texas Steamship Company, the original complainant, is in all respects
29 subsequent and subsidiary and junior to the lien of the mortages to the petitioner; and it further finds the amount due on said bonds and unpaid coupons to be $4,015,528.98, besides costs, and adjudges that, in default of the payment of such sum, the property covered by the petitioner's mortgages shall be sold, etc. Several and separate appeals were taken to the Supreme Court of the United States from the decree and from each and every part thereof by the original complainant Morgan's Louisana and
30 Texas Railroad and Steamship Company, and by the defendant, the Texas Central Railway Company, and *supersedeas* bonds were given by these companies on such appeals in the sum of $300,000 each. In this way the parties interested, being the same persons who had placed these railroads in the hands of Receivers, succeeded in staying the execution of the decree of foreclosure and sale.

On June 4, 1887, a short time after the entry of the
31 decree of foreclosure and sale, the Receivers applied for leave to borrow $40,000 on certificates, alleging that, owing to the protracted drought, the receipts of the company had been insufficient to pay ordinary operating expenses, and that they would continue to be insufficient to pay such expenses until the crops began to come in, about September, 1887. The Receivers, however, did not press this petition, or obtain any action under the same, and they succeeded in operating the road, notwithstanding the alleged impossibility. The petitioner consulted with the

holders of bonds as to whether they were willing to have 32
a preferred debt created to take precedence of the lien of the mortgages and of the decree of foreclosure, and was able to ascertain the wishes of the holders of at least four-fifths of the bonds. They were all unwilling to consent that any such preferred debt should in any way be created. On the contrary, they instructed the trustee to oppose the creation of such indebtedness, representing that they were willing to buy the property and put it in order at their own expense, but were not willing to advance 33
the money which seemed to be necessary to reconstruct the road so that it might fulfill its obligations to the public, so long as the foreclosure decree remained unexecuted; and they further stated that they were willing, if the Trustee were placed in possession of the property, or if the bondholders themselves should become the owners thereof through a reorganized company, to provide a sufficient sum of money to put the road in good repair; but nevertheless they considered the 34
course which had been pursued by the parties controlling, through their holdings of stock, the organization of the Texas Central Railway Company and of the Morgan Company, to be dictated simply by a desire to ruin the interests of the bondholders in the property and make it impossible for them to recover their indebtedness, and if possible to encumber the property with first liens to such an extent that the bondholders would be obliged to abandon their interest. In February last the Trustee moved in the Supreme 35
Court that the cause be advanced upon the docket, to be heard out of its order, and such motion was denied, the appellants filing a brief in opposition thereto. Before this motion to advance was heard in the Supreme Court, the Receivers filed a new petition, in which they asked that certificates might be issued to the extent of $120,000. This was referred to the Master. Objections were filed before the Master, but he reported in favor of making such an order. His

report was filed. Exceptions thereto were duly filed, and the matter came on for hearing before his Honor, Judge Pardee, who made an order authorizing the issue of the certificates, being Exhibit "B." The Trustee then presented to Judge Pardee its petition of appeal, being Exhibit "A," and at the same time an order for signature, with a blank for the amount of bond to be given to operate as a *supersedeas*, and another blank for the amount of bond in case it should not so operate. Judge Pardee refused to allow the appeal, and to fix the amounts of the bonds, his reasons therefor being stated in his opinion, a copy of which is presented with these papers. He, however, suspended execution of the order complained of until June 25th, to enable the matter to be laid before the Honorable Supreme Court Justice, or for the petitioner to take such further steps for relief as counsel might advise.

Thereupon the petitioner, at the earliest day on which an appointment could be arranged, made such application to the Honorable Justice Lamar, who heard argument on the 25th day of June, 1888, and took the papers for consideration. In the latter part of August, Justice Lamar handed down his decision, concurring in the decision of the Circuit Judge, but with no further opinion.

I have had personal charge of this case from its commencement, and as far as I understand the law in such cases, everything that could be done on the application for allowance of the appeal has been done.

HERBERT B. TURNER.

Sworn to before me,
October 13, 1888.

JOHN MCCLURE,
Notary Public,
N. Y. County.

PETITIONER'S EXHIBIT "A." 40

Petition for Allowance of Appeal and Proposed Order Thereon.

IN THE UNITED STATES CIRCUIT COURT,

FOR THE NORTHERN DISTRICT OF TEXAS.

MORGAN'S LOUISIANA AND TEXAS RAILROAD AND STEAMSHIP COMPANY

vs.

THE TEXAS CENTRAL RAILWAY COMPANY, THE FARMERS' LOAN AND TRUST COMPANY, as Trustee, and THE METROPOLITAN TRUST COMPANY OF THE CITY OF NEW YORK, as Trustee.

Original Bill. 41

In Equity, No. 21. 42

THE FARMERS' LOAN AND TRUST COMPANY, as Trustee.

vs.

THE TEXAS CENTRAL RAILWAY COMPANY, THE METROPOLITAN TRUST COMPANY OF THE CITY OF NEW YORK, and MORGAN'S LOUISIANA AND TEXAS RAILROAD AND STEAMSHIP COMPANY.

Cross Bill, No. 33. 43

To the Honorable the Judges of said Court:

The petition of the Farmers' Loan and Trust Company, defendant and cross-complainant herein, respectfully shows to the Court:

That on the 26th day of May, 1888, your Honors entered and filed in this cause a final decree in which

your petitioner is informed and believes there is serious and grave error to its prejudice; that your petitioner desires to appeal from the whole of said decree, and desires that said appeal shall operate as a *supersedeas;* wherefore, your petitioner prays that your Honors may grant it an order of appeal from the whole of said decree, returnable to the Supreme Court of the United States, at the October term thereof, for the year 1888, and that said appeal may operate as a *supersedeas*, on the petitioner giving a bond, to be approved by the Court, in such sum as the Court may fix; and your petitioner prays that citations of appeal, in due form of law, may be directed to Morgan's Louisiana and Texas Railroad and Steamship Company, to the Texas Central Railway Company, and to the Metropolitan Trust Company of the City of New York, as Trustee, commanding them, and each of them, to appear and answer this appeal.

TURNER, MCCLURE & ROLSTON,
Solicitors for Farmers' Loan
and Trust Company.

The foregoing petition considered, it is ordered that the Farmers' Loan and Trust Company may be allowed an appeal from the whole decree herein, rendered and filed on the 26th day of May, 1888, on its giving a bond, with surety approved by the Court, in the sum of $——, and that citations of appeal issue as prayed in the foregoing petition. In case the said complainant take an appeal not to operate as a *supersedeas*, the bond for such appeal is hereby fixed at the sum $——.

June ——, 1888.

48

PETITIONER'S EXHIBIT "B."

Decree Allowing Issue of $120,000 Receivers' Certificates.

UNITED STATES DISTRICT COURT,

NORTHERN DISTRICT OF TEXAS, AT WACO.

49

MORGAN'S LOUISIANA AND TEXAS R. R. & S. S. Co. *vs.* THE TEXAS CENTRAL RAILWAY Co. *et als.*	No. 21. Equity Docket.

This cause came on to be heard by consent of parties on the 26th day of May, 1888, before the Hon. 50
Don A. Pardee, Circuit Judge, sitting in Chambers, at the City of New Orleans, on the exceptions of the Farmers' Loan and Trust Co. to the report of the Special Master herein, filed March 21, 1888, on the petition of the Receivers to borrow one hundred and twenty thousand dollars, herein filed on February 15, 1888, and was argued by counsel, whereupon, and on consideration thereof,

It is ordered, adjudged and decreed that the exceptions of the said Farmers' Loan and Trust Company to 51
the said Master's report be overruled, and the said Master's report be confirmed, and

It is further ordered, adjudged and decreed that the joint Receivers herein, Benjamin G. Clarke and Charles Dillingham, be authorized to borrow the sum of $120,000, for which sum they are authorized and empowered to issue certificates or debentures not to exceed $120,000 in amount, and each of said debentures

or certificates to be for such amount as said Receivers may deem proper, to bear a rate of interest not exceeding six per cent. per annum, to fall due at the option of the Receivers on or before the expiration of two years from their date, and said Receivers are authorized to sell said certificates at not less than par, the proceeds thereof to be applied to the purpose of the necessary repairs and reconstructions recommended in the report of the Master.

It is further ordered that said certificates and obligations, when issued, shall become, and they are hereby declared to be, a lien upon the roadbed, rolling stock, depots, and all other property of said railway company, including the net earnings thereof after deducting expenses of this receivership, and the operation of the road, said lien to be prior to all other liens except the lien for $25,000 of Receivers' certificates heretofore allowed to be issued under orders of this Court.

It is further ordered that said certificates or debentures be substantially in the form following, to wit:

"Office Receivers Texas Central Railway Company, Benjamin G. Clarke and Charles Dillingham, Joint Receivers, Ross, Texas, , 188 . Two years after date, or on or before the expiration of two years, at the option of the Receivers, for value received, we, Benjamin G. Clarke and Charles Dillingham, as joint Receivers of the property of the Texas Central Railway Company, do, under and by virtue of the power in us vested by an order of the Circuit Court of the United States in and for the Northern District of Texas, at Waco, made on the 28th day of May, 1888, in a certain cause wherein Morgan's Louisiana and Texas Railroad and Steamship Company is complainant, and the Texas Central Railway Company *et als.*, are defendants, No. 21 of the Equity Docket, hereby promise to pay, at the bank, in the City of New York, to bearer hereof, dollars, with interest from date until paid, at the rate of per cent. per annum.

"This obligation is one of a series amounting to one 56
hundred and twenty thousand ($120,000) dollars authorized by said Court to be made by us, as Receivers, and is, together with others of the same series, made and declared to be a lien upon the roadbed, rolling-stock, depots, and all other property of the said railway company, of every nature and description, wheresoever situated, and also a lien upon the residue of the earnings, incomes and profits of said property, that there may be, after deducting operating expenses, costs of repair and the expenses of our Receivership, 57
and said lien to be prior to all other liens, except the lien of $25,000 of Receivers' certificates heretofore issued under order of the said Court."

(Signed) DON A. PARDEE,
Judge.

PETITIONER'S EXHIBIT "C."

Opinion of Judge Pardee. 58

The Texas Central Railroad property is in the possession of the Court through Receivers, at the instance of the complainant, Morgan's Louisiana Railroad and Steamship Company, and the consent of the cross-complainant, the Farmers' Loan and Trust Company.

It is the duty of the Court appointing the Receivers to see that the property is properly cared for and preserved, and, if possible, managed as a "going concern." 59

Wallace *vs.* Loomis, 97 U. S., 146.
Barton *vs.* Barbour, 104 U. S., 134.
Miltenberger *vs.* Logansport, 106 U. S., 312.
Burnham *vs.* Bowen, 111 U. S., 781.

This duty continues after final decree and pending appeal.

Bronson *vs.* La Crosse R. R., 1 Wall., 410.

60 From the nature of the case, "the proper and judicious measures necessary to adopt to preserve the property from waste and loss," are within the sound discretion of the Court.

An appeal will not lie to revise the action of the Court below in a matter of discretion.

See cases cited, Kinney's Digest, vol. 1, p. 79, No. 36.

61 It is doubtful whether an order in an equity cause authorizing a Receiver to borrow money for the preservation of the property in dispute, and to issue debentures therefor, secured by lien on the income and *corpus* of the property, is a final decree within the well-settled rule declared in Bostwick *vs.* Brinckerhoff, 106 U. S., 3.

I take it the rule is the same after as before final decree in the main cause.

62 The Receivership being with the consent of the Farmers' Loan and Trust Company, that company ought not to object to the discretion exercised by the Court for the preservation of the property, particularly when, as in this case, said company is fully protected against all burdens placed on the property to its damage after final decree and pending appeal by the appeal bond of $500,000 given by the appellant.

Kountze *vs.* Omaha Hotel Co., 107 U. S., 378.

63 The effect of an appeal with *supersedeas* in this case will be practically to deprive the Circuit Court of the power to administer and preserve the property in its custody, and the result will be the waste and deterioration of the property to a larger extent than the amount of the Receivers' certificates proposed, and possibly the forfeiture of the franchise from the inability to maintain the railroad as a "going concern" for the transportation of persons and property.

See Master's report printed in the record.

An appeal granted on the bond offered (to wit, a nominal one) would leave no responsible party for the damage necessarily resulting to the property, whichever way the appeal might be decided. 64

The case is one where the jurisdiction is complete and undisputed—where the receivership is consented to by the complaining party—where the order complained of is an imperative necessity—where the action of the Court is discretionary—and where the complaining party is fully protected in case the order finally results to his damage. 65

I am compelled to refuse the appeal; nevertheless, that the party may have an appeal, if the law gives one, I will suspend execution of the order complained of until June 25, to enable the matter to be laid before the Hon. Circuit Justice, or for the petitioner to take such other steps for relief as counsel may advise.

June 12, 1888.

DON A. PARDEE,
Circuit Judge. 66

I concur in the foregoing order of the Circuit Judge.

Macon, Ga., August, 1888.

L. Q. C. LAMAR,
Circuit Justice.

67

68 UNITED STATES SUPREME COURT.

OCTOBER, 1888.

Ex parte THE FARMERS' LOAN AND TRUST COMPANY,
Petitioner.

IN THE MATTER

of

69 THE FARMERS' LOAN AND TRUST COMPANY, as Trustee,

vs.

THE TEXAS CENTRAL RAILWAY COMPANY *et al.*

BRIEF FOR PETITIONER

70 ON MOTION FOR RULE TO SHOW CAUSE WHY MANDAMUS SHOULD NOT ISSUE, ETC.

The facts on which the motion is based are fully set forth in the petition and affidavit herewith presented, and it is not deemed necessary to recapitulate them. It is enough to say that, after a final decree of foreclosure and sale, and pending an appeal from such decree, the Receivers of the defendant Railway Company obtained a decree of the Circuit Court which rendered
71 the decree of foreclosure and sale authorizing them to issue certificates to the amount of $120,000, the same to be a lien on all the mortgaged property, superior to the lien of the foreclosed mortgages; and that the Court below endeavors to prevent the mortgage Trustee from appealing from the decree creating such preferred lien, and refuses to fix the amount of bond to be given in case the appeal shall operate as a *supersedeas*, and the amount of bond in case the appeal shall not so operate. In other words,

the Court below, having acted in a matter affecting a most substantial right, refuses to permit us to bring that action before this Court for review. 72

It will be noted that the petition of appeal filed by the petitioner prayed the Circuit Court to grant an order of appeal from the whole of the decree, such appeal to operate as a *supersedeas* on the petitioner giving a bond, to be approved by the Court *in such sum as the Court might fix;* and further prayed for the issue of citations. 73

POINTS.

I.

THE TRUSTEE HAS AN ABSOLUTE RIGHT TO APPEAL FROM THE ORDER IN QUESTION, AND THE ACTION OF THE JUDGE IN ALLOWING THE APPEAL IS MERELY PERFUNCTORY. 74

"An appeal shall be allowed to the Supreme Court from all final decrees of any Circuit Court, or of any District Court acting as a Circuit Court, in cases of equity and of admiralty and maritime jurisdiction, where the matter in dispute, exclusive of costs, exceeds the sum or value of two thousand dollars, and the Supreme Court is required to receive, hear and determine such appeal."

U. S. Revised Statutes, § 692. 75

The statute is peremptory. It recognizes an absolute right which the party may exercise at his volition and which is independent of judicial discretion.

United States vs. *Adams*, 6 Wall., 101.

But it may be contended that the decree permitting the issue of the certificates is not a *final decree* within the meaning of the statute.

76 In the first place that question is not for the Circuit Judge to determine. If an appeal does not lie from the decree, the remedy is by application to the Supreme Court to dismiss the appeal, and will be entertained by this Court at once, without waiting for the cause to be reached upon the docket.

Simmons vs. *Burlington, Cedar Rapids and Northern*, 123 U. S., 52.

When a petition of appeal is presented to the Circuit
77 Judge, he is, in fact, simply asked to fix the amount of the bond. This is practically all his duty. The allowance of the appeal is a matter of course, and he has no discretion as to whether or not he will allow it.

"When the Court has rendered its judgment, either party may appeal, that is, has the right of appeal, and may exercise that right of his own volition. The Court cannot prevent it, nor is the right dependent upon any judicial discretion."

Per Justice Miller in *United States* vs.
78 *Adams*, 6 Wall, 107.

In a case in which an appeal was taken orally in open court, and no entry appeared upon the minutes, Chief Justice Taney says:

"In making the appeal the party exercised a legal right. It was made in open court, and the Clerk had official knowledge of the fact."

Speaking of the order subsequently made by the
79 Judge, directing the entry to be made in the Order Book, he says:

"But the appellant had legal rights, and he cannot be deprived of them by any irregularity in a clerical entry. Strictly speaking, nothing ought to have been entered either in the minutes or on the Order Book as of the day the decree was passed, except the appeal itself. And this, indeed, would appear to have been all the Judge ordered. For the appeal could not have been allowed on that day, *because an order of a Court, or a Judge allowing an appeal is in effect nothing more*

than an order to send the transcript of the record to the Appellate Court. It is the Clerk's authority for making the return to the Superior Court. And that order could not be legally given until the security required by law was offered and approved. But, when the appeal was taken, the approval of the Court could not be made the only condition upon which it should be allowed. He had a right by law to carry up his appeal, if the security he offered was approved by the Judge, out of court, in vacation; and no entry of the Clerk, and indeed no order of the Court, could deprive him of this right."

Hudgins vs. *Kemp*, 18 How., 530, 537–8.

An allowance of appeal by the Circuit Judge is not an adjudication as to whether the appeal will lie or not.

"A contrary doctrine would be exceedingly inconvenient if it could be maintained, and would throw upon a single Judge the responsibility which properly belongs to the Court. And it does not by any means follow that the Judge who authorizes the appeal has made up his own mind that the party is legally entitled to it. He may, and no doubt often does, entertain doubts upon the subject, or may regard the point as new and undecided, and upon which different opinions may be entertained, and in such case he grants the appeal in order to bring the matter before the Court and enable it to decide for itself whether the case is or is not within their appellate jurisdiction as regulated by the Act of Congress."

Chief Justice Taney, in

Callan vs. *May*, 2 Black, 541.

The Circuit Judge, in his opinion refusing the appeal, says:

"It is doubtful whether an order in an equity cause, authorizing a Receiver to borrow money for the preservation of the property in dispute and to issue debentures therefor, secured by lien on the income and *corpus* of the property, is a final decree within the well-settled rule declared in *Bostwick* vs. *Brinkerhoff*, (106 U S., 3). I take it the rule is the same after as before final decree in the main cause."

84 *Bostwick* vs. *Brinkerhoff* was a motion to dismiss a writ of error to the Court of Appeals of the State of New York. The Chief Justice says:

"The rule is well settled and of long standing that a judgment or decree, to be final within the meaning of that term, as used in the acts of Congress, giving this Court jurisdiction on appeals and writs of error, must terminate the litigation between the parties on the merits of the cause, so that if there should be an affirmance here, the Court below will have nothing to do but to execute the judgment or decree it had
85 already rendered" (citing cases.) "It is not always easy to decide when decrees in equity are final within this rule, and there may be some apparent conflict in the cases on that subject; but in the common law courts the question has ever been a difficult one."

The Chief Justice then goes on to say *that the common law case before him* was a judgment of reversal, with leave for further proceedings in the Court below, and could not, therefore, be brought to the Supreme Court on writ of error.
86

This certainly does not hold, or tend to hold, that a decree in an equity cause, authorizing a Receiver, not only to borrow money, *but to issue certificates for that money which shall be a lien prior to the mortgage debt*, is not appealable.

Such decrees have repeatedly been the subject of appeal to this Court.

In *Williams* vs. *Morgan* (111 U. S., 684), a decree of
87 the Circuit Court fixing compensation of mortgage trustees was held to be a final decree, as to which the Supreme Court had jurisdiction on appeal. Justice Bradley in this case says:

"That the order is such as could be appealed from we think is equally apparent. It was final in its nature, and was made *in a matter distinct from the general subject of the litigation, a matter by itself*, which affected only the parties to the particular controversy and those whom they represented."

An interlocutory order is of necessity an order made during the pendency of the cause and before the final decree. It is possible that an order authorizing the issuing of receiver's certificates, even though it gives them a lien prior to the lien of the mortgages on the property, may not at once be appealable, because it is an interlocutory order, and will be reviewed when the final decree comes up on appeal. But the case is very different when the final decree has already been entered, and the Court assumes, in the exercise of its jurisdiction, which is simply a jurisdiction to *preserve* the property, *to create a preferred debt.* An order like that must be in its very nature subject to review, whether it is made before or after final decree. If it is made before final decree, it is reviewed by appeal from the decree itself; if it is made after final decree, it must necessarily be considered a final decree and be subject to review as such. 88 89

In *Forgay* vs. *Conrad*, (6 How., 201, 204), Chief Justice Taney, speaking of final decrees, says: 90

"When the decree decides the right to the property in contest, and directs it to be delivered up by the defendant to the complainant, or directs it to be sold, or directs the defendant to pay a certain sum of money to the complainant, and the complainant is entitled to have such decree carried into immediate execution, the decree must be regarded as *a final one to that extent*, and authorizes an appeal to this Court, although so much of the bill is retained in the Circuit Court as is necessary for the purpose of adjusting by a further decree the amounts between the parties pursuant to the decree passed. This rule, of course, does not extend to cases where money is directed to be paid into Court, or property to be delivered to a receiver, or property to be held in trust to be delivered to a new trustee appointed by the Court, or cases of a like description. Orders of that kind are frequently and necessarily made in the progress of a cause. But they are interlocutory only, and intended to preserve the subject matter in dispute from waste or deterioration, and to keep within the control of the Court *until the rights of the* parties concerned can be adjudicated by a final decree." 91

92 In limiting the right of appeal to final decrees, it was obviously the object of the law to save the unnecessary expense and delay of repeated appeals in the same suit, and to have the whole case *and every matter* in controversy in it decided in a single appeal. Cases, indeed, sometimes arise where the purposes of justice require that the property in controversy should be placed in the hands of a receiver, or a trustee be charged, or money be paid into Court. *But orders of this description stand upon very different principles from the interlocutory orders of which we are speaking.*"

93 This case of *Forgay* vs. *Conrad*, was expressly affirmed in *Thompson* vs. *Deane*, (7 Wall., 342.)

In *Stovall* vs. *Banks*, (10 Wall., 586), Mr. Justice Strong says:

"It cannot be maintained that a decree which adjudges a certain sum of money to be due from a defendant to the complainant, and awards execution to collect it, is not a final decree, conclusive upon the parties."

94 In this case the decree complained of takes from us just so much of the security for our debt, and it is admitted that the security is entirely inadequate. Therefore this decree takes a certain sum of money which is due from the defendant to us, and is therefore an appealable decree.

In the case of the *Wabash and Erie Canal Co.* vs. *Beers*, (1 Black, 54), Chief Justice Taney held a decree final because, as he said, it left no question of right between the parties open to future adjudication. So in our case,
95 there is no question as to the lien of these certificates left open to future adjudication by this decree.

Of course, it is not contended that every order or decree which the Court may make after the entry of the final decree in the cause, adjudicating the rights between the parties, is subject to review as a final decree. Orders of the Court after judgment for carrying the judgment into effect are not appealable.

Callam vs. *May* (2 Black, 541).

It is evident that there are two kinds of orders 96
or decrees that may be made after the final decree or judgment in the cause, namely, decrees for the purpose of carrying out the judgment, and other decrees, such as that under consideration, which effect substantial rights, and which the Court assumes to make by reason of its power, to preserve the property. We will now give a number of instances in which the Supreme Court of the United States has entertained appeals from orders of this nature.

97

Blossom vs. *Milwaukee R. R. Co.* (1 Wall., 655) was a case in which a decree had been rendered foreclosing the mortgage and ordering a sale, and on the sale under the decree Blossom bid for the property. The sale was suspended at that point and never actually proceeded further. Blossom, however, went to the District Court and by petition, prayed to have the sale completed and confirmed. His application was, however, refused, and from the order of refusal he took an appeal, which, on motion to dismiss, was sustained by the Supreme 98
Court, Mr. Justice Miller giving the opinion, from which we extract as follows:

"Although this Court has frequently decided that where the act complained of was a mere ministerial duty necessarily growing out of the decree which was being carried into effect, no appeal would lie, it has never decreed that in *no* case arising after a decree which is final only in the sense which would allow it to be appealed, will an appeal be allowed from an order of the Court, however it might affect the important interests or decide matters not before the Court when 99
the first decree was rendered. Such a doctrine would place a very large proportion of the most important matters adjudged by Courts of Chancery beyond the reach of an appeal. On the contrary, this Court has repeatedly considered appeals from the decrees of the Circuit Courts, upon matters arising *after the case had been here*, and the Courts below had entered decrees in accordance with the directions of this Court. At the present term, in the case of A. R. Orchard *vs.* John Hughes, the Court refused to dismiss an appeal from an order confirming a sale under a decree of foreclosure,

100 and directed that the case should be heard, with the appeal from the principal decree in the suit which ordered the sale."

Fosdick vs. *Schall* (99 U. S., 235), was a case in which, after the decree of foreclosure and sale, the Court made an order as to returning certain cars and paying certain money out of the funds arising from the sale. From this order an appeal was sustained.

So again in *Trustees* vs. *Greenough* (105 U. S., 527) it
101 was held that an appeal lay from a decree in equity for costs when they were directed to be paid, not by a particular party, but out of the fund in the hands or under the control of the Court The order appealed from in this case was made after the final decree in the cause.

Burnham vs. *Bowen* (111 U. S., 776), was a case in which a decree of foreclosure and sale was made in October, 1876, and four years after the decree ordering
102 the payment to the defendant of a certain sum was made, from which the Supreme Court entertained an appeal.

The Circuit Judge seems to have misapprehended our position with respect to the bond, for he says that the bond offered was a nominal one. We presented no bond to him for approval, but waited until he should fix the amount, expressing, however, our readiness to furnish such bond as he might require. In our peti-
103 tion of appeal we stated that we desired to appeal from the whole of the decree, the appeal to operate as a *supersedeas*, and prayed that he would grant the petition and order the appeal, returnable to the Supreme Court, to operate as a *supersedeas*, on the petitioner giving a bond, to be approved by the Court *in such sum as the Court might fix.*

It is true, that in presenting this petition to the Judge, which was done by letter, we stated to him that we thought that the bond on *supersedeas* should be a

small one; but, so far as the record goes, we simply asked the Judge to carry out what we conceived to be his duty, in naming the amount in which we had to give a bond, if we desired it to act as a *supersedeas*, and the amount in case we did not desire it to act as a *supersedeas*. 104

II. 105

THE DECREE FROM WHICH WE APPEAL IS NOT ONE WHICH LIES WITHIN THE DISCRETIONARY POWERS OF THE CIRCUIT COURT AND WHICH THEREFORE CANNOT BE REVIEWED ON APPEAL.

The Circuit Judge, in his opinion, alludes to the duty of the Court to preserve the property which is the subject of the litigation, and says that, from the nature of the case, the measures to be adopted to preserve property are within the sound discretion of the Court, and that an appeal will not lie to revise the action of the Court below in the matter of discretion. 106

We do not propose to question the power of the Court to preserve and care for the property. What we do question is its power to practically reconstruct it and to create a preferred indebtedness for that purpose. This Court has decided that that cannot be done.

107

The action of the Circuit Court is not discretionary in any such sense as not to be open to review.

The discretion which is not subject to appeal is confined almost entirely to matters of practice.

Phillips' U. S. Supreme Court Practice, chap. VII., p. 837.

The cases to which the Circuit Judge refers in 1 Kinney's Digest, p. 79, No. 36, as sustaining his claim,

are the following: *Murphy* vs. *Stewart* (2 How., 263), a case of amendment of the record; Morsell *vs.* Hall (13 How., 212), a motion to enter an *exoneratur* of bail; *Turner* vs. *Yates* (16 How., 14), affirming the duty of the Court below to guard against surprise; *Pomeroy* vs. *Indiana State Bank* (1 Wall., 592), holding that a motion for a new trial is addressed to the discretion of the Circuit Court, and that the decision of that Court in granting or refusing it, is not a proper subject of a bill of exceptions; *Freeborn* vs. *Smith* (2 Wall., 160), holding that this Court will not hear, on writ of error, matters which are properly the subject of application for new trial, and *Erskine* vs. *Hohnbach* (14 Wall., 613), purely a question of practice.

The decree in question undertakes to create a preferred debt and to postpone our lien to the lien of that debt. If the Court can do this to the amount of $120,000, it can do it to the amount of millions and wipe out our entire security, giving us no right of appeal.

III.

A WRIT OF MANDAMUS IS THE APPROPRIATE REMEDY WHEN THE CIRCUIT COURT REFUSES TO ALLOW AN APPEAL.

If a party has done all that the statute requires to entitle him to appeal, and the allowance thereof is refused, a mandamus lies to compel the allowance.

United States vs. *Gomez*, 3 Wall., 752.

In *Ex parte Jordan* (94 U. S., 248), an application was made for mandamus to the Circuit Court of the United States for the Southern District of New York, to compel the allowance of an appeal from its decision. The Circuit Judge had refused to allow the appeal. The

Chief Justice, in commenting upon section 692 of the Revised Statutes, relative to allowance of appeal said: 112

"The language of the statute is 'shall be allowed,' which means 'must be allowed,' when asked for by one who stands in such relation to the case that he can demand it. The question upon such an application is, not what will be gained by an appeal, but whether the party asking it can appeal at all. * * * When this reference was made the petitioners were defendants and actors in respect to the litigation. They certainly had the right to contend before the Master and to except to his report. This they did and their exceptions were overruled. * * * A writ of mandamus will be issued directing the Circuit Court to allow the appeal asked for." 113

Ex parte Railroad Company (95 U. S., 221) is another case in which it was decided that a party adversely affected by a final decree has a right to appeal to this Court which, if withheld, may be enforced by mandamus.

114

The writ of *supersedeas* is an important one, and whenever a party complies with all the requisitions of the statute in relation thereto, but the stay of execution is still denied to him, he may obtain relief from the Supreme Court, either by mandamus or writ of *supersedeas*.

Ex parte Milwaukee R. R. Co., 5 Wall., 575.

A *supersedeas* being a statutory remedy, can only be obtained by a strict compliance with all the required conditions, none of which can be dispensed with (see *Hogan* vs. *Ross*, 11 How., 297.) Time is an essential element in the proceeding, and it is true that if a delay beyond the limited time occurs, the right to the remedy is gone, and the successful party holds his decree discharged from this means of staying proceedings for its enforcement; but it has been distinctly held that a *nunc pro tunc* order will be effectual for such purpose, where it appears that the delay was the act 115

of the Court, and not of the parties, and that injustice will not be done.

Sage vs. *Railroad Co.*, 93 U. S., 412.

The Circuit Judge made the order in New Orleans. The petitioner is a New York corporation. We acted very rapidly, applying for an allowance of the appeal about two weeks after the decree was rendered. The application was considered, and denied after argument. We could do nothing more, except make application to the Circuit Court Justice, which was done as speedily as possible, for there can be no appeal without the taking of security either for costs, or costs and damages, and this is to be done by the Court or a judge or justice, by the acceptance of the security.

Sage vs. *Railroad Co.*, 96 U. S., 714.

That is the position in which we have stood ever since. We cannot take our appeal, because we cannot get a judge to fix the amount of security. We made the application within the sixty days, and consequently, under the decision above noted, if we are granted the relief now sought in the appellate court, it is clear that a *nunc pro tunc* order can and should be made, for the reason that the delay was the act of the Court, and not that of the petitioner.

IV.

THE BONDHOLDERS HAVE ABSOLUTELY NO PROTECTION WHATEVER EXCEPT BY APPEAL IN THIS CASE.

The Circuit Judge, in his opinion, says that the Trustee is fully protected against all burdens placed upon the property to its damage after final decree and upon an appeal, by the appeal bond given by the appellants, on appeal from the main cause; and he

quotes the case of *Kountze* vs. *Omaha Hotel Company* 120
(107 U. S., 378). That is a case in which the Court expressly holds that in a foreclosure suit the appeal bond is *not* intended as security for either the amount of the decree or the interest accruing pending the appeal, *but for such damages as may arise from the delay incident to the appeal* (p. 390). Furthermore, the appellants can exercise their right to have the appeal dismissed, notwithstanding any opposition that we might make.

Cleveland vs. *Chamberlain*, 1 Black, 419. 121
Ladham vs. *Deming*, 9 Wall., 145.

The Circuit Judge also says that the effect of an appeal with *supersedeas* would be practically to deprive the Court of the power to administer and preserve the property in its custody, and the result would be the waste and deterioration of the property to a larger extent than the amount of the Receivers' certificates proposed, and possibly the forfeiture of the franchise.

122

We submit, with great respect, that the questions as to what the effect of an appeal may be and what the practical result is, are not pertinent on a motion to fix security on an appeal. The question is whether we are entitled to appeal or not, and if the appeal that we are entitled to shall work the ruin of the property which is mortgaged for so much more than it is worth, that is our loss, and not the loss of any other person.

The Circuit Judge also says in his opinion that the 123
Receivership being with the consent of petitioner, it ought not now to object to the discretion exercised by the Court for the preservation of the property.

The property was placed in the hands of Receivers on the application of the Morgan Company. Possibly the trustee may be considered as having, by its position subsequently taken in the cause, assented to the receivership. Nevertheless, that implies no assent further than that the Receivers shall keep the property.

124 We have never consented that they should reconstruct it, and we do not propose to give any such consent. Indeed, we have shown, and propose still to show our dissent by every means in our power.

To recapitulate, we insist that we have an absolute right to an appeal, the office of the Judge being simply to fix the amount of the bond which we must give in case the appeal acts as a *supersedeas*, and the amount
125 which we must give in case it does not so operate; that the decree in question is in no respect discretionary, but affects a most substantial right and is open to review, as it postpones the lien of our mortgage to the lien of securities to be issued by the Receivers to our great detriment; that such an order is a final decree within the meaning of the statute, and that we have no protection except that afforded us by an appeal from the decree.

The Circuit Court does not hold the key to the gates
126 of this Court. Saving exceptional cases which prove the rule and which are created by statute, it belongs to the appellate Court to determine its own jurisdiction and to say who are and who are not entitled to appeal. Otherwise this Court would practically be at the mercy of the Circuit Court. The object of applying to the Circuit Judge for allowance of appeal is not to open discussion as to the merits of the decree, but simply that the Judge, in addition to fixing the amount of the bond, may, in the discharge of a ministerial duty,
127 authenticate the proceedings as to their regularity and authenticity and as to the identity of the parties.

THE RULE TO SHOW CAUSE SHOULD BE GRANTED AS ASKED FOR.

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